LAB MANUAL CONTENTS

1) Institute V/M; Department V/M/PEO & PO/PSO Statements.
2) Lab Course Syllabus, Lab Course Outcomes, CO Vs PO/PSO Mapping
3) Index page with
   a. University prescribed lab experiments
   b. 2 or more Advanced experiments (prescribed by the faculty)
   c. 2 or more Design Experiments (prescribed by the faculty).
   d. 5 or 10 or more Open-ended Experiments (Problem alone to be defined).
4) Index Page: Each Experiment to be mapped against COs & POs/PSOs
5) Students Lab Manual and Teachers Lab Manual Preferable!
6) 1 Lab Manual with Master Readings has to be maintained.
7) Properly corrected students' 2 lab records along students' observation notes are to be maintained.

INSTITUTE VISION AND MISSION

INSTITUTE VISION

To emerge as a Centre of Excellence for Learning and Research in the domains of engineering, computing and management.

INSTITUTE MISSION

- Provide congenial academic ambience with state-art of resources for learning and research.
- Ignite the students to acquire self-reliance in the latest technologies.
- Unleash and encourage the innate potential and creativity of students.
- Inculcate confidence to face and experience new challenges.
- Foster enterprising spirit among students.

DEPARTMENT VISION AND MISSION

DEPARTMENT VISION

To become the Centre of excellence for skilled software professionals in Computer Applications.

DEPARTMENT MISSION

- Provide congenial academic ambiance with necessary infrastructure and learning resources.
- Inculcate confidence to face and experience new challenge from industry and society

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

- Ignite the students to acquire self reliance in the State-of-the Art Technologies.
- Foster Enterprise spirit among students

Graduates of Computer Applications shall

PEO1: Have Professional competency through the application of knowledge gained from fundamental and advanced concepts of structural and functional components in software. **(Professional Competency)**

PEO2: Excel in one's career by critical thinking toward successful services and growth of the organization or as an entrepreneur or through higher studies. **(Successful Career Goals)**

PEO3:Enhance Knowledge by updating advanced technological concepts for facing the rapidly changing world and contribute to society through innovation and creativity. **(Continuing Education to Society)**

PROGRAMME OUTCOMES (PO's)

PO1: **Engineering knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: **Problem analysis**: Identify, formulate, review research literature, and analyze complex engineeringproblems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: **Design/development of solutions**: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4: **Conduct investigations of complex problems**: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5: **Modern tool usage**: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6: **The engineer and society**: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7: **Environment and sustainability**: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: **Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: **Individual and team work**: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10:**Communication**: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11:**Project management and finance**: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12:Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

II MCA - II Semester	L	T	P	C
	0	0	3	1.5

18MCA227 **WEB PROGRAMMING LAB**

Course Educational Objectives:

CEO1 : To Design Static Web pages using HTML and Dynamic Web Page using PHP.

CEO2 :To Learn a Scripting language called Java Script-used to do Client side Validation.

CEO3 :To Learn XML & MySQL tool for Defining a database for Web Applications.

CEO4 : To Explore Server Side Technologies like Servlets and JSP.

Exercise : 1

Design the following static web pages required for an online book store web site.

1) HOME PAGE:

The static home page must contain three frames.

Top frame: Logo and the college name and links to Home page, Login page, Registration page,

Catalogue page and Cart page (the description of these pages will be given below).

Left frame : At least four links for navigation, which will display the catalogue of respective links.

For e.g.: When you click the link "CSE" the catalogue for CSE Books should be displayed in the Right frame.

Right frame: The pages to the links in the left frame must be loaded here. Initially this page contains description of the web site.

2) LOGIN PAGE

3) CATOLOGUE PAGE

The catalogue page should contain the details of all the books available in the web site in a table.The details should contain the following:

Snap shot of Cover Page. , Author Name., Publisher., Price., Add to cart button.

Note: Week 2 contains the remaining pages and their description.

Exercise-2:

4) CART PAGE

The cart page contains the details about the books which are added to the cart.

Exercise-3:

REGISTRATION PAGE

Create a "*registration form* "with the following fields

1)Name(Textfield)
2) Password (password field)

3) E-mail id (text field)

4) Phone number (text field)

5) Sex (radio button)

6) Date of birth (3 select boxes)

7) Languages known (check boxes – English, Telugu, Hindi, Tamil)

8) Address (text area)

VALIDATION

Write *JavaScript* to validate the following fields of the above registration page.

Name (Name should contains alphabets and the length should not be less than 6 characters).

Password (Password should not be less than 6 characters length).

E-mail id (should not contain any invalid and must follow the standard pattern.

name@domain.com)

Phone number (Phone number should contain 10 digits only).

Note : validation of the login page can also be done with these parameters.

Exercise-4:

Design a web page using CSS (Cascading Style Sheets) which includes the following:
Use different font, styles:
Set a background image for both the page and single elements on the page.
Control the repetition of the image with the background-repeat property.
Define styles for links.
Work with layers.
Add a customized cursor.

Exercise-5:

Write an XML file which will display the Book information which includes the following:

1) Title of the book.

2) Author Name.

3) ISBN number.

4) Publisher name.

5) Edition.

6) Price.

Write a Document Type Definition (DTD) to validate the above XML file.

Display the XML file as follows.

Hint: You can use some xml editors like XML-spy.

Exercise-6:

User Authentication

Assume four users user1,user2,user3 and user4 having the passwords pwd1,pwd2,pwd3 and pwd4 respectively. Write a servelet for doing the following.

1. Create a Cookie and add these four user id's and passwords to this Cookie.

2. Read the user id and passwords entered in the Login form (week1) and authenticate with the values (user id and passwords) available in the cookies.

If he is a valid user(i.e., user-name and password match) you should welcome him by name(user-name) else you should display " You are not an authenticated user ".

Use init-parameters to do this. Store the user-names and passwords in the webinf.xml and access them in the servlet by using the getInitParameters() method.

Exercise-7:

Install a database(Mysql or Oracle).

Create a table which should contain at least the following fields: name, password, email-id, phone number(these should hold the data from the registration form).

Practice 'JDBC' connectivity.

Write a java program/servlet/JSP to connect to that database and extract data from the tables and display them. Experiment with various SQL queries.

Insert the details of the users who register with the web site, whenever a new user clicks the submit button in the registration page (week2).

Exercise-8:

Write a JSP which does the following job:

Create tables in the database which contain the details of items (books in our case like Book name , Price, Quantity, Amount)) of each category. Modify your catalogue page (week 2)in such a way that you should connect to the database and extract data from the tables and display them in the catalogue page.

IMPLEMENT THE FOLLOWING USING PHP & MySQL

Exercise-9:

i. Simple Arithmetic, Logical and Relation operation
ii. Arrays

Exercise-10:

i. String Handling

Exercise-11:

i. Exception handling
ii. Functions , Date & Time

Exercise-12:

i. File Operations

Exercise-13:

i. Various DDL, DML operations in MySQL
ii.

Exercise-14:

i. Join Operations in MySQL.
ii. Connection Establishment Between PHP and MySql Database.

On successful completion of this course, students should be able to

Course Outcomes		POs related to COs
CO1	Demonstrate Knowledge on HTML, Javascript, Servlet, JSP and PHP to develop an web applications	PO1
CO2	Analyze the Real World problems to be solved by technologies like 7Servlet, JSP and PHP	PO2
CO3	Design and Develop solutions for web applications.	PO3
CO4	Manually Test the functionality of the web application	PO4
CO5	Select appropriate design tools and procedure to implement web applications	PO5
CO6	Follow ethical principles in designing, and implementing various Technologies.	PO8
CO7	Do experiments effectively as an individual and as a member in a group.	PO9
CO8	Communicate verbally and in written form, the understandings about the experiments.	PO10
CO9	Continue updating their skill related to various web technologies like servlet, JSP,PHP for implementating various web applications during their life time	PO12

CO-PO Mapping

Course	PO / CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
C207- Web Programming	C207.1	3	-	-	-	-	-	-	-	-	-	-	-
	C207.2	-	3	-	-	-	-	-	-	-	-	-	-
	C207.3	-	-	3	-	-	-	-	-	-	-	-	-
	C207.4	-	-	-	3	-	-	-	-	-	-	-	-
	C207.5	-	-	-	-	3	-	-	-	-	-	-	-
	C207.6	-	-	-	-	-	-	-	3	-	-	-	-
	C207.7	-	-	-	-	-	-	-	-	3	-	-	-
	C207.8	-	-	-	-	-	-	-	-	-	3	-	-
	C207.9	-	-	-	-	-	-	-	-	-	-	-	3
	C207	3	3	3	3	3	-	-	3	3	3	-	3

TABLE 1: RUBRICS FOR Web Programming Lab

	Excellent(3)	Good(2)	Fair(1)
Conduct Experiments (CO1)	Student successfully completes the experiment, records the data, analyzes the experiment's main topics, and explains the experiment concisely and well.	Student successfully completes the experiment, records the data, and analyzes the experiment's main topics	Student successfully completes the experiment, records the data, and unable to analyzes.
Analysis and Synthesis (CO2)	Thorough analysis of program developed designed	Reasonable analysis of program developed	Improper analysis of program developed
Design (CO3)	Student understands what needs to be tested and designs an appropriate experiment, and explains the experiment concisely and well	Student understands what needs to be tested and designs an appropriate experiment.	Student understands what needs to be tested and does not design an appropriate experiment.
Complex Analysis & Conclusion (CO4)	Thorough comprehension through analysis/ synthesis	Reasonable comprehension through analysis/ synthesis	Improper comprehension through analysis/ synthesis
Use modern tools in executing the programs (CO5)	Student uses the tools to develop and execute the programs, and understands the limitations of the tool.	Student uses the tools correctly.	Student uses the tools correctly, unable to understand properly.
Report Writing (CO6)	Status report with clear and logical sequence of parameter using excellent language	Status report with logical sequence of parameter using understandable language	Status report not properly organized
Lab safety (CO7)	Student will demonstrate good understanding and follow lab safety	Student will demonstrate good understanding of lab safety	Students demonstrate a little knowledge of lab safety.
Ability to work in teams (CO8)	Performance on teams is excellent with clear evidence of equal distribution of tasks and Effort	Performance on teams is good with equal distribution of tasks and effort	Performance on teams is acceptable with one or more members carrying a larger amount of the effort
Continuous learning (CO9)	Highly enthusiastic towards continuous learning	Interested in continuous learning	Inadequate interest in continuous learning

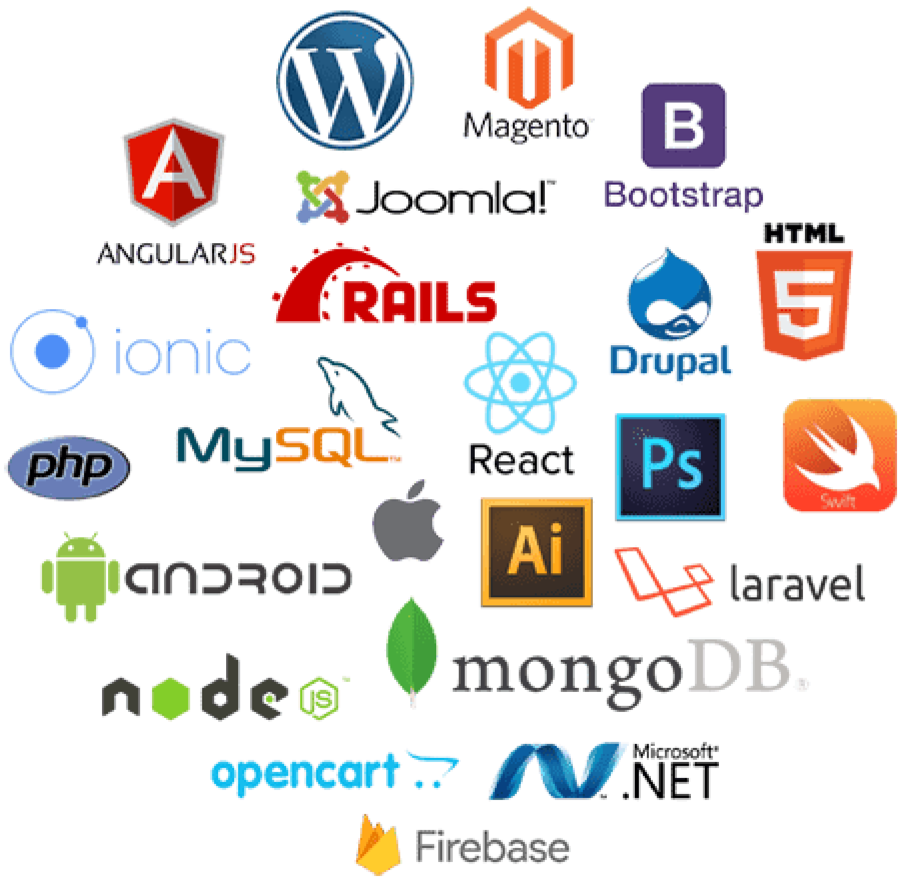
Course Outcome Attainment (R16)

Day – To – Day Evaluation	Fair	**Level 1**	If Student scored less than 80% of the total mark allotted.
	Good	**Level 2**	If Student scored greater than 80 % and less than 90% of the total mark allotted.
	Excellent	**Level 3**	If Student scored greater than 90% of the total mark allotted.
Internal Practical Exam	Fair	**Level 1**	If Student scored less than 80% of the total mark allotted.
	Good	**Level 2**	If Student scored greater than 80 % and less than 90% of the total mark allotted.
	Excellent	**Level 3**	If Student scored greater than 90% of the total mark allotted.
Term End Exam (TEE)	Fair	**Level 1**	If Student scored less than 80% of the total mark allotted.
	Good	**Level 2**	If Student scored greater than 80 % and less than 90% of the total mark allotted.
	Excellent	**Level 3**	If Student scored greater than 90% of the total mark allotted.

SREENIVASA INSTITUTE of TECHNOLOGY and MANAGEMENT STUDIES
(AUTONOMOUS)

WEB PROGRAMMING LAB MANUAL

II MCA I SEMESTER REGULATION: R16/18



FACULTY INCHARGE: R.PADMAJA
DESIGNATION :ASSISTANT PROFESSOR
DEPARTMENT:MCA

SITAMS	WEB PROGRAMMING LABORATORY	SUBJECT CODE :**16MCA216**

Sl. No.	Date	Name of the Experiment/Exercise	Page No.	Marks	Signature
1		**Design HTML Page to Illustrate** **1)ORDERED LIST** **2) UNORDERED LIST** **3) DEFINITION LIST**			
2		**Design HTML Page to Illustrate** **1) TABLE TAG and COLSPAN ATTRIBUTE** **2) TABLE TAG and ROWSPAN ATTRIBUTE** **3) TABLE TAG with both COLSPAN and ROWSPAN Attributes**			
3		**Design a HTML Page** **1) To Illustarte FRAMESET AND FRAME TAG** **2) That displays a BIODATA FORM USING FORM TAG** **3) that illustrates CASCADING STYLE SHEET**			
4		**DESIGNING A LOGIN FORM and REGISTRATION FORM (with validation)**			
5		**Write and Execute a Javascript program that illustrates** **1) String Functions** **2) Mathematical Functions** **3) Array Functions** **4) Java Script functions**			
6		**Write and Execute a Java Script Program** **1) that computes Factorial using Recursive Function** **2) that computes NCr using Recursive Function** **3) that creates User Defined Object in Javascript**			
7		**To Illustrate Java Script Regular Expression** **To Illustrate Java Script Built in Objects**			
8		**Design** **1) A Student Form with Events** **2) An Employee Form with Events**			
9		**1) Design A DTD , XML Document and check its well formedness and validness** **2) Display an XML Document with CSS**			
10		**Write a Servlet program for**			

		1) Processing a Login Form USING service METHOD OF GenericServlet 2) Processing a Color Form USING service METHOD OF GenericServlet 3) Processing a Color Form USING doGet METHOD OF HttpServlet 4) Processing a Color Form USING doPost METHOD OF HttpServlet			
11		**1) Reading Servlet parameters 2) Process a Login Form using JSP 3) Process a Color Form using JSP 4) Display a Cart Page from Catalog page**			
12		**1) Passing Data from one Page to Another Page 2)Illustration of Session and Application Scope 3) Illustration of JSTL Core Tags**			
13		**1) Process the Login Form using PHP 2) PHP Program to perform Arithmetic Operations. 3) PHP Program to perform Relational Operations.**			
14		**1) Perform Array Functions in PHP 2) Perform File Operations in PHP 3) Perform Date and Time functions in PHP**			
15		**1) NameSpaces in PHP 2) Class-Object Illustration in PHP 3) Inheritance Illustration in PHP 4) Interface Illustratin in PHP**			

Signature of the Faculty in-charge with Date

Experiment to be mapped against Cos & POs

Course Outcomes		POs related to COs
CO1	Demonstrate Knowledge on HTML, Javascript, Servlet, JSP and PHP to develop an web applications	PO1
CO2	Analyze the Real World problems to be solved by technologies like 7Servlet, JSP and PHP	PO2
CO3	Design and Develop solutions for web applications.	PO3
CO4	Manually Test the functionality of the web application	PO4
CO5	Select appropriate design tools and procedure to implement web applications	PO5
CO6	Follow ethical principles in designing, and implementing various Technologies.	PO8
CO7	Do experiments effectively as an individual and as a member in a group.	PO9
CO8	Communicate verbally and in written form, the understandings about the experiments.	PO10
CO9	Continue updating their skill related to various web technologies like servlet, JSP,PHP for implementating various web applications during their life time	PO12

HTML

EXERCISE NO.1 : DESIGNING AN ORDERED LIST IN HTML

Aim: **D**esign the following webpage using <OL>and <LI>Tags of HTML.

DEPARTMENT OF COMPUTER SCIENCE

1.B.SC COMPUTER SCIENCE
2.M.SC COMPUTER SCIENCE
3. PGDCA

DEPARTMENT OF MATHEMATICS

1.B.SC MATHEMATICS
2. M.SC MATHEMATICS
3. M.PHIL MATHEMATICS

DEPARTMENT OF ZOOLOGY

1. B.SC ZOOLOGY
2.M.SC ZOOLOGY
3.M.PHIL ZOOLOGY
4.PHD ZOOLOGY

Procedure:

Step1: Type the following html code which uses <ol> and <li> in the Notepad.

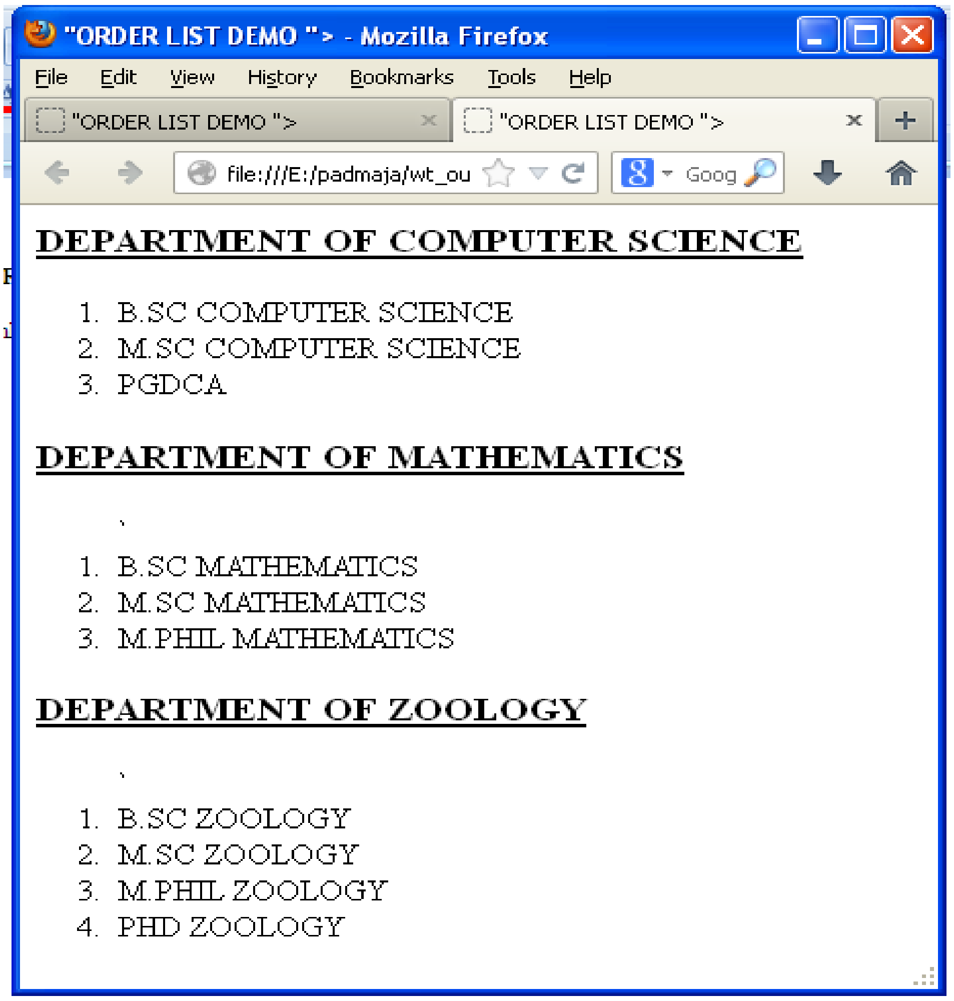
Step2: Save the file with .html extension.

Step3: Open the html file in any of the browser like Internet Explorer,Mozilla FireFoxto display the output of webpage

HTML Code

```
          <HTML>
          <HEAD>
                    <TITLE>"ORDER LIST DEMO "></TITLE>
          </HEAD>
          <BODY>
                    <H1>
                              <U>DEPARTMENT OF COMPUTER SCIENCE</U>
                    </H1>
                    <OL TYPE="1">
                              <LI>B.SC COMPUTER SCIENCE</LI>
                              <LI>M.SC COMPUTER SCIENCE</LI>
                              <LI>PGDCA</LI>
                    </OL>
                    <H1>
                              <U>DEPARTMENT OF MATHEMATICS</U>
                    </H1>
                    <OL TYPE="4">
`                             <LI>B.SC MATHEMATICS</LI>
                              <LI>M.SC MATHEMATICS</LI>
                              <LI>M.PHIL MATHEMATICS</LI>
                    </OL>
                    <H1>
                              <U>DEPARTMENT OF ZOOLOGY</U>
                    </H1>
                    <OL TYPE="7">
`                             <LI>B.SC ZOOLOGY</LI>
                              <LI>M.SC ZOOLOGY</LI>
                              <LI>M.PHIL ZOOLOGY</LI>
                              <LI>PHD ZOOLOGY</LI>
                    </OL>
          </BODY>
</HTML>
```

OUTPUT:


"ORDER LIST DEMO "> - Mozilla Firefox
File Edit View History Bookmarks Tools Help
"ORDER LIST DEMO ">
"ORDER LIST DEMO ">
file:///E:/padmaja/wt_ou
Goog

DEPARTMENT OF COMPUTER SCIENCE

1. B.SC COMPUTER SCIENCE
2. M.SC COMPUTER SCIENCE
3. PGDCA

DEPARTMENT OF MATHEMATICS

1. B.SC MATHEMATICS
2. M.SC MATHEMATICS
3. M.PHIL MATHEMATICS

DEPARTMENT OF ZOOLOGY

1. B.SC ZOOLOGY
2. M.SC ZOOLOGY
3. M.PHIL ZOOLOGY
4. PHD ZOOLOGY

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EXERCISE NO. 2: DESIGNING AN UNORDERED LIST USING UL TAG

Aim:-To design the following webpage using <UL> and <LI> tags of HTML

THE BEST FEATURE OF THE INTERNET

- YOU CAN MEET NEW PEOPLE FROM COUNTRIES AROUND THE WORLD.
- YOU HAVE ACCESS TO NEW MEDIA AS IT BECOME PUBLIC.
    - NEW GAMES
    - NEW APPLICATIONS
        - FOR BUSINESS
        - FOR PLEASURE
    - AROUND THE CLOCK NEWS
    - SEARCH ENGINES
    - SHOPPING
    - PROGRAMMING
        - HTML
        - JAVA
        - DYNAMIC HTML
        - SCRIPTS
        - NEW LANGUAGES
- LINKS
- KEEPING IN TOUCH WITH OLD FRIENDS
- IT IS THE TECHNOLOGY AND THE FEATURE.

Procedure:-

Step1: Type the following html code which uses <ol> and <li> in the Notepad.

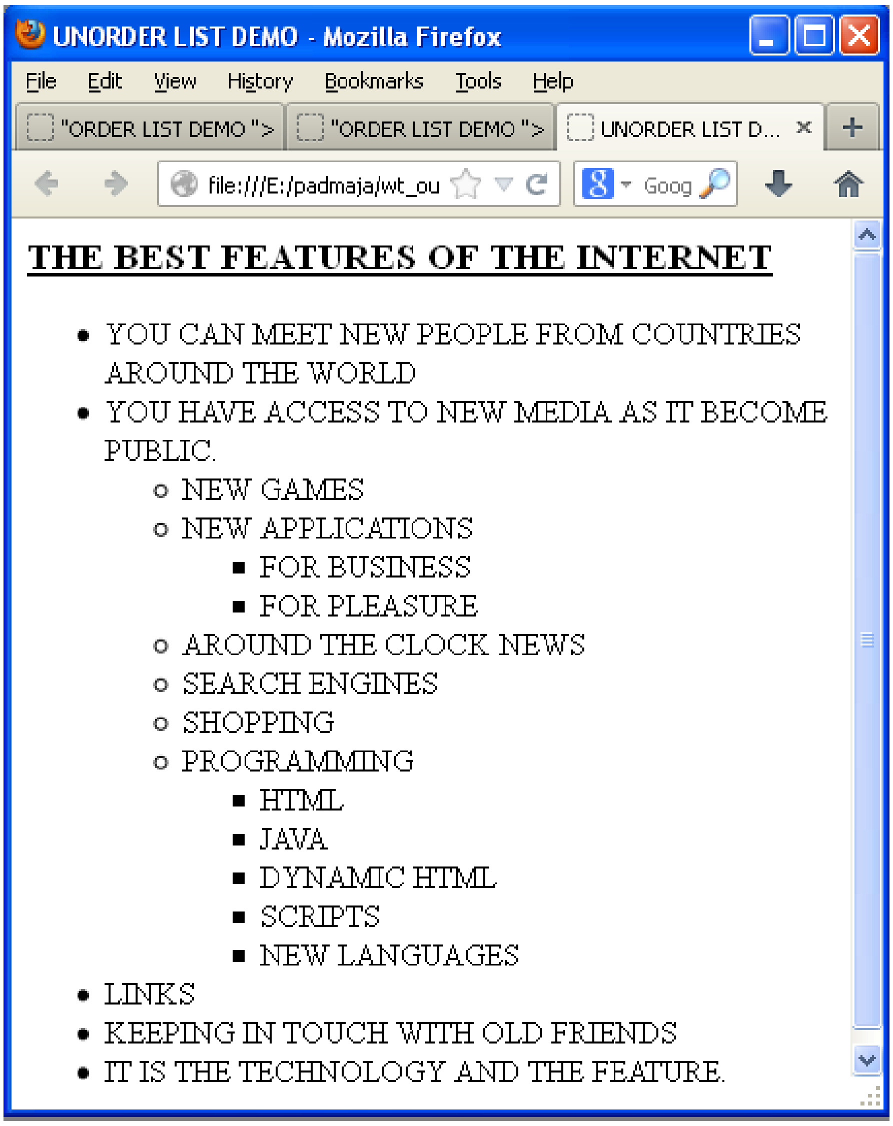
Step2: Save the file with .html extension.

Step3: Open the html file in any of the browser like Internet Explorer, Mozilla FireFoxto display the output of webpage

HTML Code

```
<HTML>
        <BODY>
              <H3><U>THE BEST FEATURE OF THE INTERNET</U></H3>
              <UL TYPE="DISC">
                     <LI>YOU CAN MEET NEW PEOPLE FROM COUNTRIES
                            AROUND THE WORLD.</LI>
                     <LI>YOU HAVE ACCESS TO NEW MEDIA AS IT BECOME
                            PUBLIC.</LI>
                            <UL TYPE="CIRCLE">
                                      <LI>NEW GAMES</LI>
                                      <LI>NEW APPLICATIONS</LI>
                                                <UL TYPE="SQUARE">
                                                          <LI>FOR BUSINESS</LI>
                                                          <LI>FOR PLEASURE</LI>
                                                </UL>
                                      <LI>AROUND THE CLOCK NEWS</LI>
                                      <LI>SEARCH ENGINES</LI>
                                      <LI>SHOPPING</LI>
                                      <LI>PROGRAMMING</LI>
                                                <UL TYPE="SQUARE">
                                                          <LI>HTML</LI>
                                                          <LI>JAVA</LI>
                                                          <LI>DYNAMIC HTML</LI>
                                                          <LI>SCRIPTS</LI>
                                                          <LI>NEW LANGUAGES</LI>
                                                </UL>
                            </UL>
<LI>LINKS</LI>
                   <LI>KEEPING IN TOUCH WITH OLD FRIENDS</LI>  <LI>IT IS THE TECHNOLOGY
                   AND THE FEATURE.</LI>
</UL>
</BODY>
</HTML>
```

OUTPUT:



THE BEST FEATURES OF THE INTERNET

- YOU CAN MEET NEW PEOPLE FROM COUNTRIES AROUND THE WORLD
- YOU HAVE ACCESS TO NEW MEDIA AS IT BECOME PUBLIC.
    - NEW GAMES
    - NEW APPLICATIONS
        - FOR BUSINESS
        - FOR PLEASURE
    - AROUND THE CLOCK NEWS
    - SEARCH ENGINES
    - SHOPPING
    - PROGRAMMING
        - HTML
        - JAVA
        - DYNAMIC HTML
        - SCRIPTS
        - NEW LANGUAGES
- LINKS
- KEEPING IN TOUCH WITH OLD FRIENDS
- IT IS THE TECHNOLOGY AND THE FEATURE.

EXERCISE NO. 3: DESIGNING A DEFINITION LIST IN HTML

HTML

Hyper Text Mark Up Language is aa language to Design Static Web page

XML

Extensible Mark Up Language is a tool to define data for web applications < /DD>

BEANS

It is a reusable software component that can be visually manipulated by any Builder tool.

SERVLET

It is a Server Side Technology

JSP

Its also a Server Side Technology

Aim:-To Design the following Definition List using <DL>, <DT> and <DD> tag of HTML.

Procedure:-

Step1: Type the following html code which uses <ol> and <li> in the Notepad.

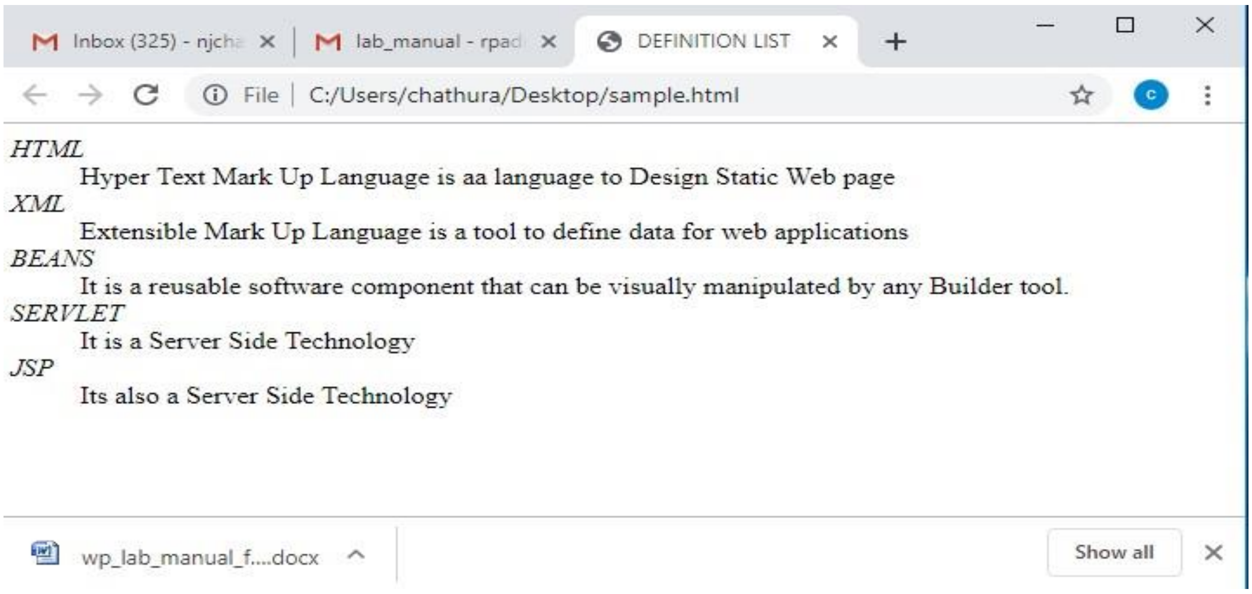
Step2: Save the file with .html extension.

Step3: Open the html file in any of the browser like Internet Explorer, Mozilla FireFoxto display the output of webpage

HTML Code

```
<HTML>
                <HEAD>
                <TITLE>DEFINITION LIST</TITLE>
</HEAD>
                           <BODY BGCOLOR="VIOLET" TEXT="MAROON">
                           <DL>
                                    <DT><I>HTML</I></DT>
                                             <DD>Hyper Text Mark Up Language is aa
                                             language to Design Static Web page</DD>
                                    <DT><I>XML</I></DT>
                                             <DD>Extensible Mark Up Language is a  tool
                                                      to define data for web applications </DD>
                                    <DT><I>BEANS</I></DT>
                                             <DD>It is a reusable software component that
                                             can be  visually manipulated by any Builder tool.</DD>
                                    <DT><I>SERVLET</I></DT>
                                             <DD> It is a Server Side Technology</DD>
                                    <DT><I>JSP</I></DT>
                                             <DD>Its also a Server Side Technology</DD>
                           </DL>
                           </BODY>
</HTML>
```

OUTPUT:



```
HTML
        Hyper Text Mark Up Language is aa language to Design Static Web page
XML
        Extensible Mark Up Language is a tool to define data for web applications
BEANS
        It is a reusable software component that can be visually manipulated by any Builder tool.
SERVLET
        It is a Server Side Technology
JSP
        Its also a Server Side Technology
```

EXERCISE NO. 4 : DESIGNING A HTML TABLE USING COLSPAN ATTRIBUTE

Aim:-To Design the following table by using **<Table>** tag and **colspan** attribute.

MARUTHI	
OMNIVAN	200000
MARUTHI800	242000
MARUTHI1000	310000
MARUTHIZEN	390000
TATA	
SUMO	475000
SIERRA	447000
ESTATE	462000
AMBASSADOR	
PETROL	324000
DIESEL	387000

Procedure:-

Step1: Type the following html code which uses colspan and table tags in Notepad.colspan is used to merge the columns

Step2: Save the file with .html extension.

Step3: Open the html file in any of the browser like Internet Explorer, Mozilla FireFoxto display the output of webpage

HTML Code :

```
<HTML>
<BODY>
                              <TABLE BORDER=4 WIDTH="40%">
                                        <TR>
                                                  <THCOLSPAN=4>MARUTHI</TH>
                                        </TR>
                                        <TR>
                                                  <TD>OMNIVAN</TD>
                                                  <TD>200000</TD>
                                        </TR>
                                        <TR>
                                                  <TD>MARUTHI 800</TD>
                                                  <TD>242000</TD>
                                        </TR>
                                        <TR>
                                                  <TD>MARUTHI 1000</TD>
                                                  <TD>310000</TD>
                                        </TR>
                                        <TR>
                                                  <TD>MARUTHIZEN</TD>
                                                  <TD>390000</TD>
                                        </TR>
                                        <TR>
                                                  <THCOLSPAN=2>TATA</TH>
                                        </TR>
                                        <TR>
                                                  <TD>SUMO</TD>
                                                  <TD>475000</TD>
                                        </TR>
                                        <TR>
                                                  <TD>SIERRA</TD>
                                                  <TD>447000</TD>
                                        <TR>
                                                  <TD>ESTATE</TD>
                                                  <TD>462000</TD>
                                        </TR>
                                        <TR>
                                                  <THCOLSPAN=2>AMBASSADOR</TH>
                                        </TR>
                                        <TR>
                                                  <TD>PETROL</TD>
                                                  <TD>324000</TD>
                                        </TR>
                                        <TR>
                                                  <TD>DIESEL</TD>
                                                  <TD>387000</TD>
                                        </TR>
                              </TABLE>
</BODY></HTML>
```

OUTPUT:

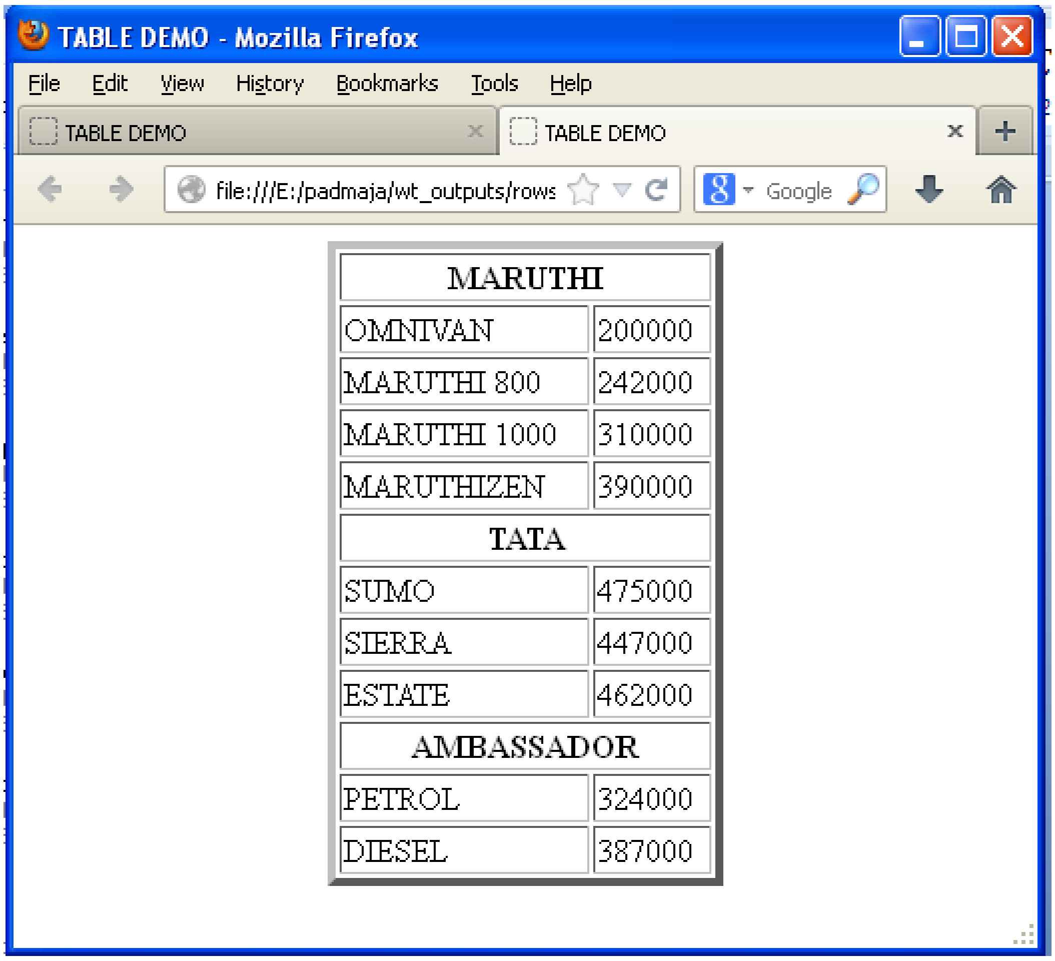


TABLE DEMO - Mozilla Firefox
File Edit View History Bookmarks Tools Help
TABLE DEMO
TABLE DEMO
file:///E:/padmaja/wt_outputs/rows
Google

MARUTHI	
OMNIVAN	200000
MARUTHI 800	242000
MARUTHI 1000	310000
MARUTHIZEN	390000
TATA	
SUMO	475000
SIERRA	447000
ESTATE	462000
AMBASSADOR	
PETROL	324000
DIESEL	387000

EXERCISE NO. 5: DESIGN A HTML TABLE USING ROWSPAN ATTRIBUTE

Aim:-To Design the following webpage using **<table> tag** and **rowspan attribute.**

CAR		**PRICE**
MARUTHI	OMNIVAN	200000
	MARUTHI800	242000
	MARUTHI1000	310000
	MARUTHIZEN	390000
TATA	SUMO	475000
	SIERRA	447000
AMBASSADOR	PETROL	324000
	DIESEL	387000

Procedure:-

Step1: Type the following html code which uses **<table> tagand rowspan attribute** in Notepad.Rowspan attribute is used to merge the two or more rows.

Step2: Save the file with .html extension.

Step3: Open the html file in any of the browser like Internet Explorer, Mozilla FireFoxto display the output of webpage

TABLE TAG and ROWSPAN ATTRIBUTE DEMO:

```
<HTML>
                        <BODY>
                                <TABLE BORDER=4 ALIGN="CENTER"
                                        WIDTH="60%">
                                        <TRCOLSPAN=2>
                                                <THCOLSPAN=2>CAR</TH>
                                                <TH>PRICE</TH>
                                        </TR>
                                        <TR>
                                                <TD ROWSPAN=4>MARUTHI</TD>
                                                <TD>OMNIVAN</TD>
                                                <TD>200000</TD>
                                        </TR>
                                        <TR>
                                                <TD>MARUTHI 800</TD>
                                                <TD>242000</TD>
                                        </TR>
                                        <TR>
                                                <TD>MARUTHI 1000</TD>
                                                <TD>310000</TD>
                                        </TR>
                                        <TR>
                                                <TD>MARUTHIZEN</TD>
                                                <TD>390000</TD>
                                        </TR>
                                        <TR>
                                                <TD ROWSPAN=2>TATA</TD>
                                                <TD>SUMO</TD>
                                                <TD>475000</TD>
                                        </TR>
                                        <TR>
                                                <TD>ESTATE</TD>
                                                <TD>462000</TD>
                                        </TR>
                                        <TR>
                                                <TD
                                                ROWSPAN=2>AMBASSADOR</TD>
                                                <TD>PETROL</TD>
                                                <TD>324000</TD>
                                        </TR>
                                        <TR>
                                                <TD>DIESEL</TD>
                                                <TD>387000</TD>
                                        </TR>
                                </TABLE>
                        </BODY>
</HTML>
```

OUTPUT:

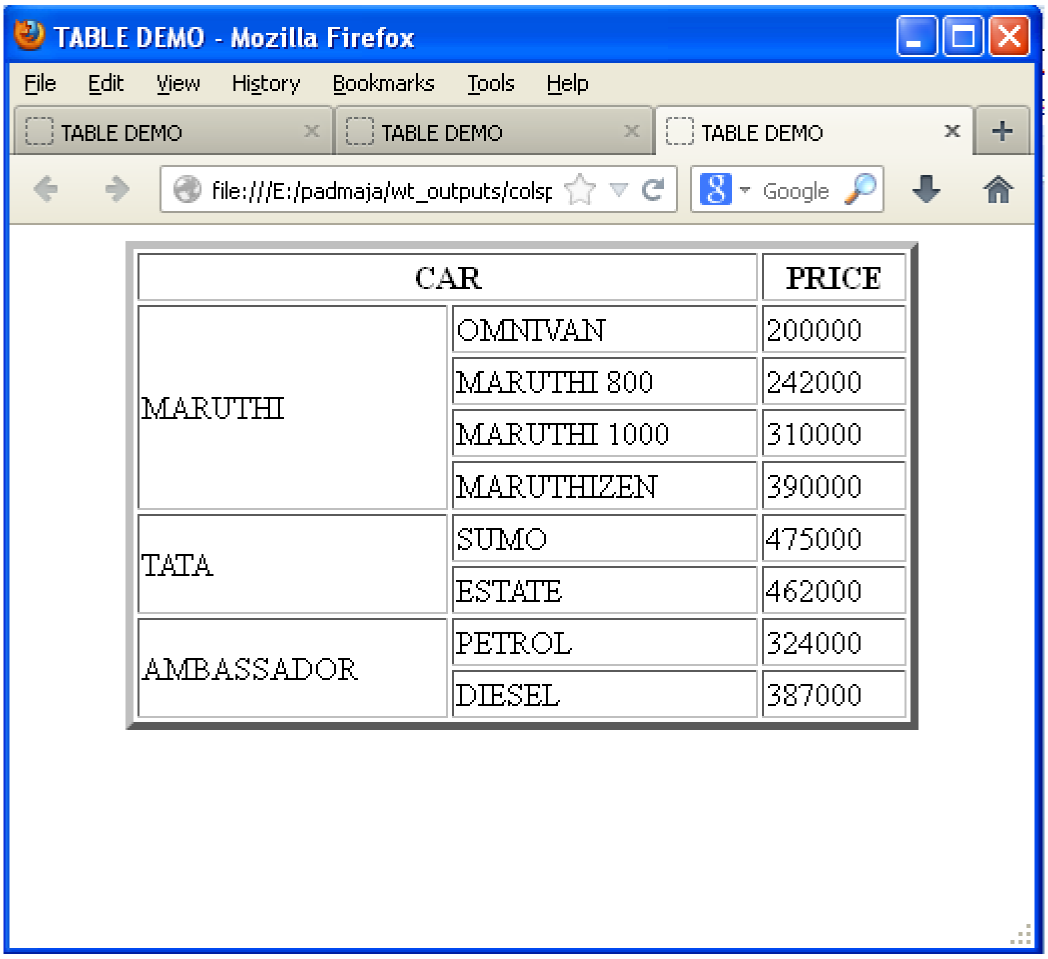


TABLE DEMO - Mozilla Firefox
File Edit View History Bookmarks Tools Help
TABLE DEMO
TABLE DEMO
TABLE DEMO
file:///E:/padmaja/wt_outputs/colsp
Google

CAR		PRICE
MARUTHI	OMNIVAN	200000
	MARUTHI 800	242000
	MARUTHI 1000	310000
	MARUTHIZEN	390000
TATA	SUMO	475000
	ESTATE	462000
AMBASSADOR	PETROL	324000
	DIESEL	387000

EXERCISE NO.6: DESIGN A HTML TABLE TO DISPLAY MCA TIME-TABLE

DAY/TIME	1 9.00AM To 9.50AM	2 9.50AM To 10.40AM	T E A B R E A K	3 10.55AM To 11.45AM	4 11.46AM To 12.25AM	L U N C H B R E A K	5 1.30PM To 2.20PM	6 2.21PM To 3.10PM	7 3.11PM To 4.00PM
MON	COOR	PT		DBMS	WEB		WEB PROGRAMMING LAB		
TUE	WEB	SE		COOR	CN		DBMS	CN	WEB
WED	SE	COOR		CN	DBMS		UNIX LAB		
THU	DBMS	WEB		COOR	PT		COOR	CN	SE
FRI	SE	<- DBMS		LAB ->			SE	WEB	DBMS
SAT	CN	WEB		SE	DBMS		COOR	LIB	CN

Aim:-To design the following webpage using **<Table> tag** with **rowspan and colspan attribute.**

Procedure:-

Step1: Type the following html code by using <table><tr>, <th>and <td>tags with colspan and rowspan attribute

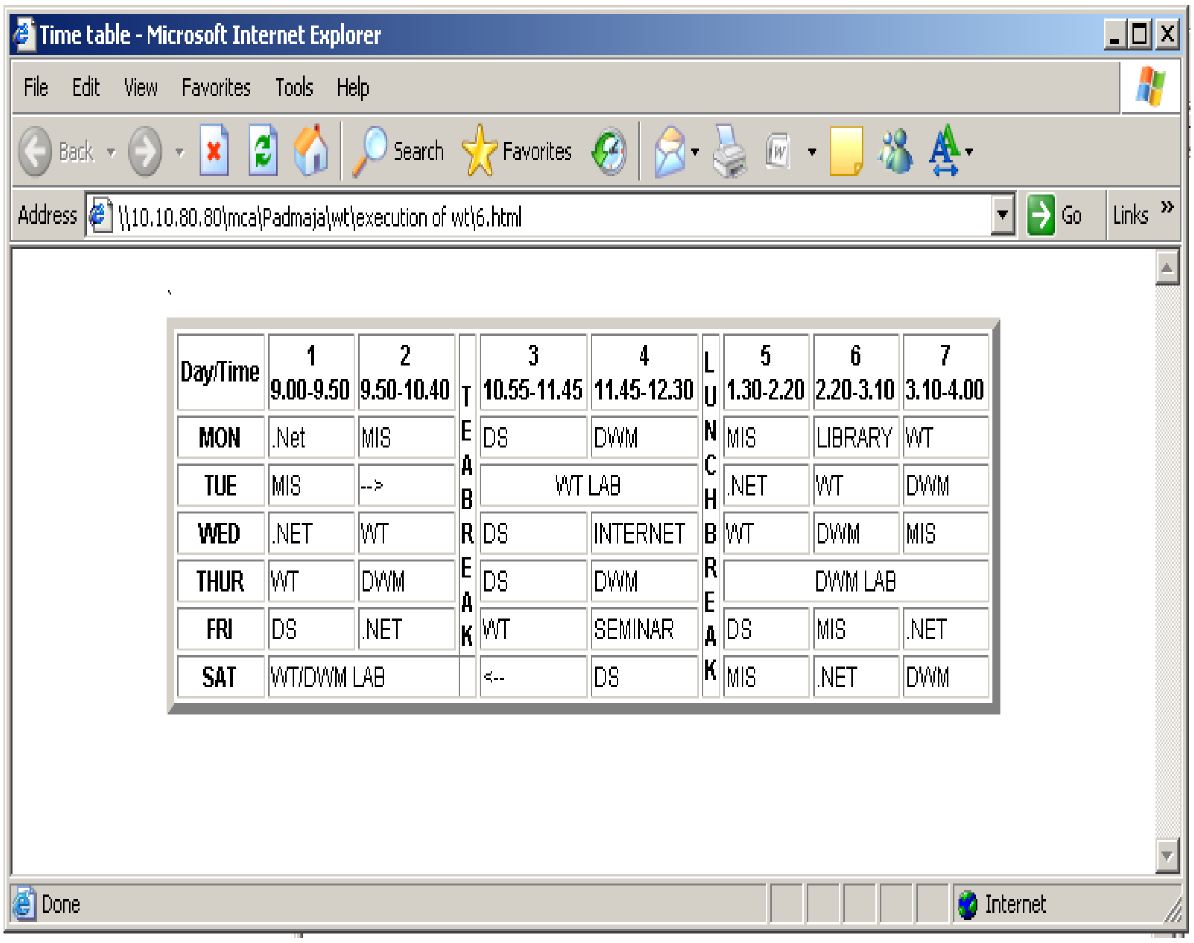
Step2: Save the file with .html extension.

Step3: Open the html file in any of the browser like Internet Explorer, Mozilla FireFoxto display the output of webpage.

TIMETABLE USING TABLE TAG:

```
<HTML>

        <HEAD>
                        <TITLE>TIME TABLE</TITLE>
        </HEAD>
        <BODY>
                        <TABLE BORDER="5" WIDTH="75%"
                                ALIGN="CENTER">
                        <TR>
                                <TH>DAY/TIME</TH>
                                <TH>1</BR>9.00-9.50</TH>
                                <TH>2</BR>9.50-10.40</TH>
                                <TH ROWSPAN="7">T</BR>E
                                        </BR>A</BR>B</BR>R</BR>E
                                        </BR>A</BR>K</BR></TH>
                                <TH>3</BR>10.55-11.45</TH>
                                <TH>4</BR>11.45-12.30</TH>
                                <TH ROWSPAN="7">L</BR>U
                                        </BR>N</BR>C</BR>H</BR>B
                                        </BR>R</BR>E</BR>A</BR>K</BR></TH>
                                <TH>5</BR>1.30-2.20</TH>
                                <TH>6</BR>2.20-3.10</TH>
`                               <TH>7</BR>3.10-4.00</TH>
                        </TR>
                        <TR>
                                <TH>MON</TH>
                                <TD>.NET</TD>
                                <TD>MIS</TD>
                                <TD>DS</TD>
                                <TD>DWM</TD>
                                <TD>MIS</TD>
                                <TD>LIBRARY</TD>
                                <TD>WT</TD>
                        </TR>
                        <TR>
                                <TH>TUE</TH>
                                <TD>MIS</TD>
                                <TD>--></TD>
                                <TD COLSPAN = 2 ALIGN = "CENTER">
                                        WT LAB</TD>
                                <TD>.NET</TD>
                                <TD>WT</TD>
                                <TD>DWM</TD>
                        </TR>
                        <TR>
                                <TH>WED</TH>
                                <TD>.NET</TD>
                                <TD>WT</TD>
                                <TD>DS</TD>
                                <TD>INTERNET</TD>
                                <TD>WT</TD>
                                <TD>DWM</TD>
                                <TD>MIS</TD>
                        </TR>
                        <TR>
                                <TH>THUR</TH>
                                <TD>WT</TD>
                                <TD>DWM</TD>
                                <TD>DS</TD>
                                <TD>DWM</TD>
                                <TD COLSPAN="3" ALIGN = "CENTER">
                                        DWM LAB</TD>
                        </TR>
                        <TR>
                                <TH>FRI</TH>
                                <TD>DS</TD>
                                <TD>.NET</TD>
                                <TD>WT</TD>
                                <TD>SEMINAR</TD>
                                <TD>DS</TD>
                                <TD>MIS</TD>
                                <TD>.NET</TD>
                        </TR>
                        <TR>
                                <TH>SAT</TH>
                                <TD COLSPAN="3">WT/DWM LAB</TD>
                                <TD><--</TD>
                                <TD>DS</TD>
                                <TD>MIS</TD>
                                <TD>.NET</TD>
                                <TD>DWM</TD>
                        </TR>
                        </TABLE>
                        </BODY>
</HTML>
```

OUTPUT:


Time table - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Favorites
Address
Go
Links
Done
Internet

\\10.10.80.80\mca\Padmaja\wt\execution of wt\6.html

Day/Time	1 9.00-9.50	2 9.50-10.40	TEA BREAK	3 10.55-11.45	4 11.45-12.30	LUNCH BREAK	5 1.30-2.20	6 2.20-3.10	7 3.10-4.00
MON	.Net	MIS		DS	DWM		MIS	LIBRARY	WT
TUE	MIS	-->		WT LAB			.NET	WT	DWM
WED	.NET	WT		DS	INTERNET		WT	DWM	MIS
THUR	WT	DWM		DS	DWM		DWM LAB		
FRI	DS	.NET		WT	SEMINAR		DS	MIS	.NET
SAT	WT/DWM LAB			<--	DS		MIS	.NET	DWM

EXERCISE NO. 7: DESIGNING SET OF FRAMES IN HTML

Aim:-To design the following webpage using <frameset> , <frame> tags in html code.

HTML is a Markup language for describing web documents • HTML stands for Hyper Text Markup Language • A Markup Language is a set of Markup tags • HTML is a universal documentation Language • HTML is a commonly used language for designing static web page	**What is XML ?** ▪ XML stands for Extensible Markup Language ▪ XML was designed to describe data, not to display data ▪ XML tags are not predefined ▪ DTD and XSD are the languages to define XML document schema	
What is Java Bean ? Java Bean is a reusable software component which can be visually manipulated by any buider tools.	**What is Servlets ?** Java Servlets are programs that run on a Web or Application server and act as a middle layer between a request coming from a Web browser or other HTTP client and databases or applications on the HTTP server.	**What is JSP ?** JavaServer Pages (JSP) is a technology for developing web pages that support dynamic content which helps developers insert java code in HTML pages by making use of special JSP tags, most of which start with <% and end with %>.

Procedure:-

Step1: Type the following html code by using <frameset> and <frame> tags

Step2: Save the file with .html extension.

Step3: Open the html file in any of the browser like Internet Explorer, Mozilla FireFoxto display the output of webpage

FRAMESET AND FRAME TAG ILLUSTRATION:

FramesetDemo.html

```
<html>
     <head>
          <title> Frames demo</title>
     </head>
     <frameset rows = "50%, 50%">
          <frameset cols = "50%,50%">
                  <frame name = "html" src = "html.html"/>
                  <frame name = "xml" src = "xml.html"/>
          </frameset>
          <frameset cols = "40%,30%,30%">
                  <frame name = "bean" src = "bean.html"/>
                  <frame name = "jsp" src = "jsp.html"/>
                  <frame name = "servlet" src = "servlet.html"/>
          </frameset>
     </frameset>
</html>
```

html.html

```
<html>
  <head>
          <title>FrameDemo</title>
  </head>
  <body>
          <h3>HTML is a <b>Markup</b> language for describing web documents</h3>
          <ul type = "disc">
                  <li> HTML stands for Hyper Text Markup Language</li>
                  <li> A Markup Language is a set of Markup tags</li>
                  <li> HTML is a universal documentation Language</li>
                  <li> HTML is a commonly  used language for designing static web page</li>
          </ul>
  </body>
</html>
```

xml.html

```
     <html>
     <head>
       <title>FrameDemo</title>
     </head>
     <body>
       <h3><b>What is XML ?</b></h3>
       <ul type = "square">
               <li> XML stands for Extensible Markup Language</li>
               <li> XML was designed to describe data, not to display data</li>
               <li> XML tags are not predefined </li>
               <li> DTD and XSD are the languages to define XML document schema</li>
       </ul>
     </body>
</html>
```

bean.html

```
        <html>
                <head>
                        <title>FrameDemo</title>
                </head>
                <body>
                        <h2><b>What is Java Bean ?</b></h2>
                                <p> Java Bean is a reusable software component
                                        which can be visually manipulated by any buider tools.
                                </p>
                </body>
        </html>
```

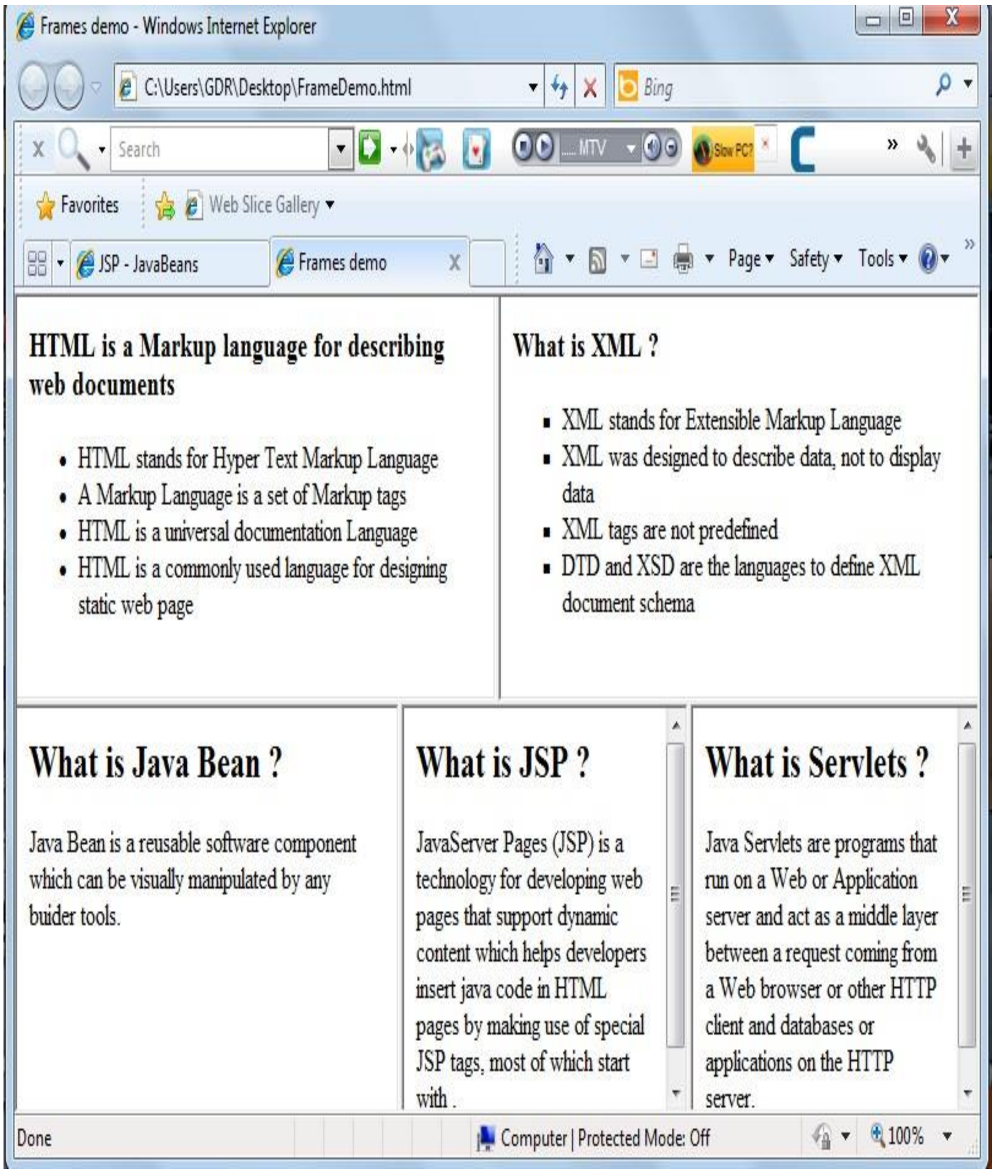
Servlet.html

```
      <html>
        <head>
                <title>FrameDemo</title>
        </head>
        <body>
                <h2><b>What is Servlets ?</b></h2>

                        <p> Java Servlets are programs that run on a Web or Application
                                       server      and act as a middle layer between a request coming
                                       from a Web browser or other HTTP client and databases or applications on the
                                       HTTP server.
                        </p>
        </body>
      </html>
```

jsp.html

```
        <html>
                <head>
                        <title>FrameDemo</title>
                </head>
                <body>
                        <h2><b>What is JSP ?</b></h2>
                                <p>JavaServer Pages (JSP) is a technology for developing web
                                        pages that support dynamic content which helps developers
                                        insert java code in HTML pages by making use of special
                                        JSP tags, most of which start with <% and end with %>.
                                </p>
                </body>
        </html>
```

OUTPUT:


Frames demo - Windows Internet Explorer
C:\Users\GDR\Desktop\FrameDemo.html
Bing
Search
Favorites
Web Slice Gallery
JSP - JavaBeans
Frames demo
Page
Safety
Tools
Done
Computer | Protected Mode: Off
100%

HTML is a Markup language for describing web documents

- HTML stands for Hyper Text Markup Language
- A Markup Language is a set of Markup tags
- HTML is a universal documentation Language
- HTML is a commonly used language for designing static web page

What is XML ?

- XML stands for Extensible Markup Language
- XML was designed to describe data, not to display data
- XML tags are not predefined
- DTD and XSD are the languages to define XML document schema

What is Java Bean ?

Java Bean is a reusable software component which can be visually manipulated by any buider tools.

What is JSP ?

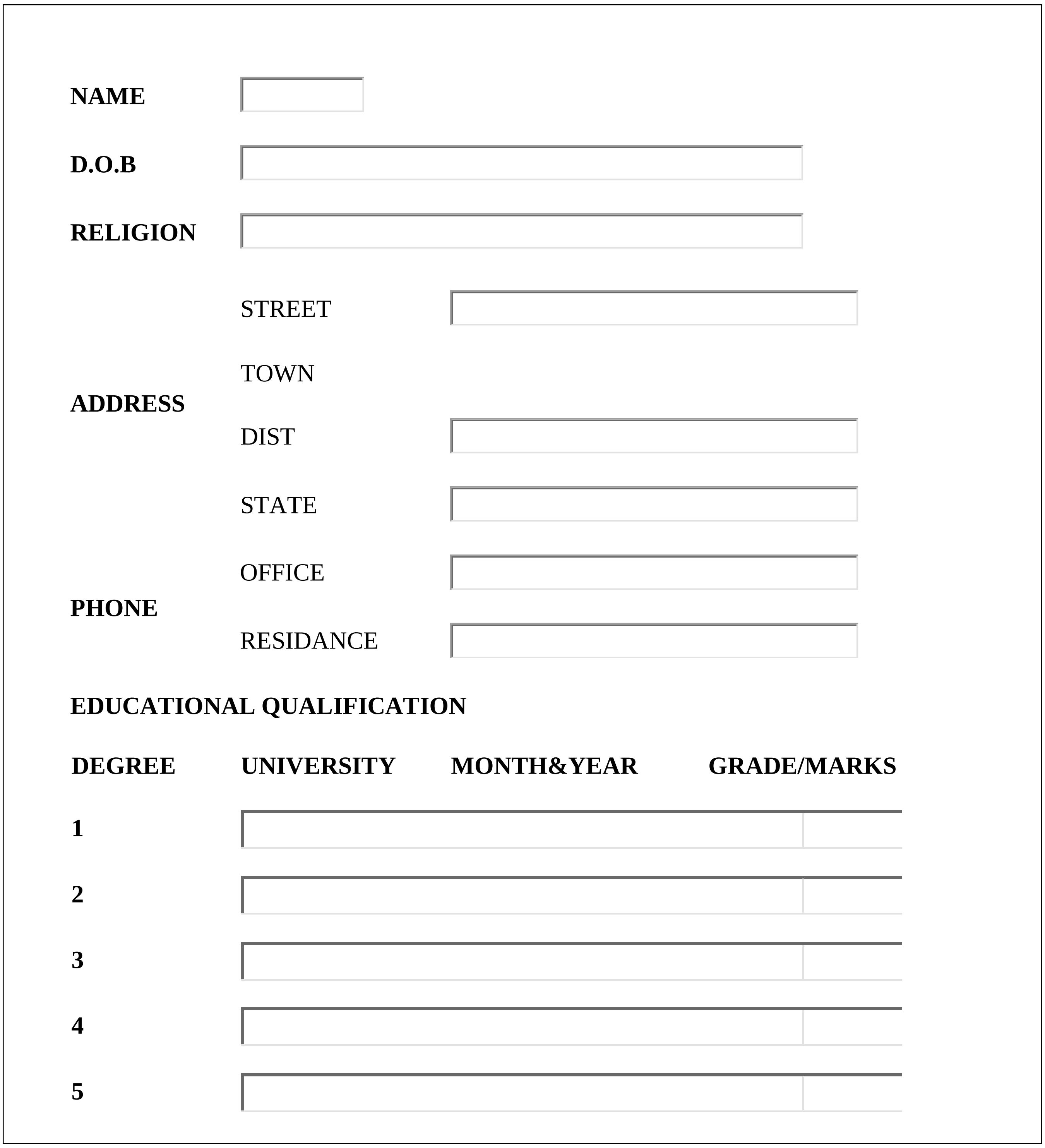
JavaServer Pages (JSP) is a technology for developing web pages that support dynamic content which helps developers insert java code in HTML pages by making use of special JSP tags, most of which start with .

What is Servlets ?

Java Servlets are programs that run on a Web or Application server and act as a middle layer between a request coming from a Web browser or other HTTP client and databases or applications on the HTTP server.

EXERCISE NO. 8: DESIGN A BIO-DATA FORM USING HTML CODE

Aim:-To design the following webpage using <Form> and <input> tags in html code.



NAME		
D.O.B		
RELIGION		
ADDRESS	STREET	
	TOWN	
	DIST	
	STATE	
PHONE	OFFICE	
	RESIDANCE	

EDUCATIONAL QUALIFICATION

DEGREE	**UNIVERSITY**	**MONTH&YEAR**	**GRADE/MARKS**
1			
2			
3			
4			
5			

Procedure:-

Step1: Open the notepad and type the following html code by using <form> and <input> tags

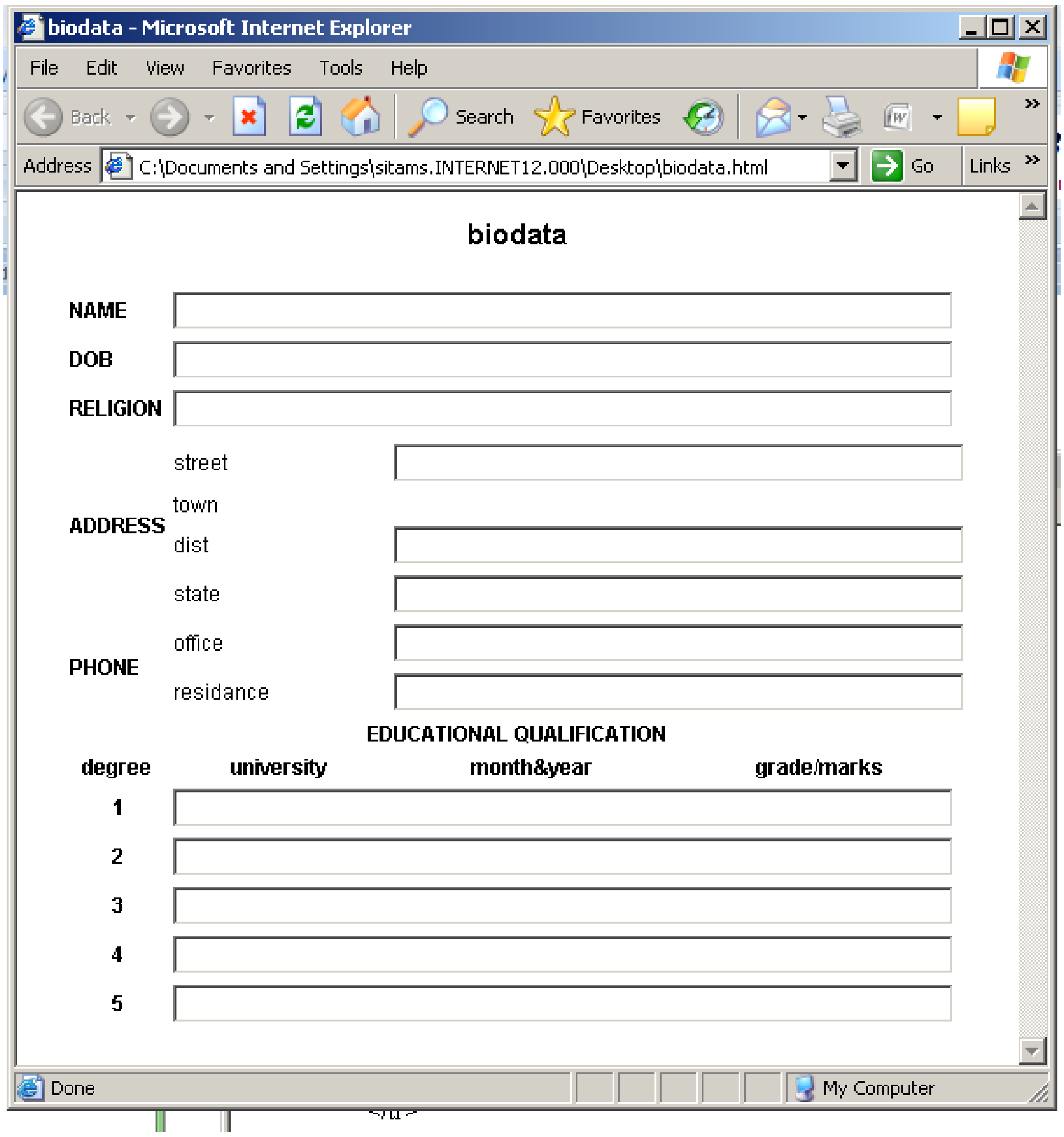
Step2: Save the file with .html extension.

Step3: Open the html file in any browser to view the results.

BIODATA FORM USING FORM TAG:

```
<HTML>
    <HEAD>
                    <TITLE>BIODATA</TITLE>
    </HEAD>
    <BODY>
        <FORM NAME="BIODATA" METHOD="POST">
<H2 ALIGN=CENTER>BIODATA</H2>
<TABLE ALIGN=CENTER WIDTH="30%">
            <TR>
                <TH>NAME</TH>
                <TD COLSPAN="5"><INPUT TYPE="TEXT"  S IZE=70>
            </TR>
            <TR>
                <TH>D.O.B</TH>
                <TD COLSPAN="5"><INPUT TYPE="TEXT" SIZE=70>
            </TR>
            <TR>
                <TH>RELIGION</TH>
                <TD COLSPAN="5"><INPUT TYPE="TEXT" SIZE=70>
            </TR>
            <TR>
                <TH ROWSPAN="5">ADDRESS</TH>
            </TR>
            <TR>
                <TD>STREET</TD>
                <TD COLSPAN="4"><INPUT TYPE="TEXT" SIZE=50>
            </TR>
            <TR>
                <TD>TOWN</TD>
                <TD COLSPAN="4”><INPUT TYPE="TEXT" SIZE=50>
                </TR>
            <TR>
                <TD>DIST</TD>
                <TD COLSPAN="4"><INPUT TYPE="TEXT"  SIZE=50>
            </TR>
            <TR>
                <TD>STATE</TD>
                <TD COLSPAN="4"><INPUT TYPE="TEXT" SIZE=50>
            </TR>
            <TR>
                <TH ROWSPAN="2">PHONE</TH>
                <TD>OFFICE</TD>
                <TD COLSPAN="4"><INPUT TYPE="TEXT" SIZE=50>
            </TR>
            <TR>
                <TD>RESIDANCE</TD>
                <TD COLSPAN="4"><INPUT TYPE="TEXT" SIZE=50>
            </TR>
            <TR>
                <TH COLSPAN="6">EDUCATIONAL QUALIFICATION</TH>

            </TR>
            <TR>
                <TH>DEGREE</TH>
                <TH>UNIVERSITY</TH>
                <TH>MONTH&YEAR</TH>
                <TH>GRADE/MARKS</TH>
            </TR>
            <TR>
                <TH>1</TH>
                <TD COLSPAN="4"><INPUT TYPE="TEXT"  SIZE=70>
            </TR>
            <TR>
                <TH>2</TH>
                <TD COLSPAN="4"><INPUT TYPE="TEXT" SIZE=70>
            </TR>
            <TR>
                <TH>3</TH>
                <TD COLSPAN="4"><INPUT TYPE="TEXT"  SIZE=70>
            </TR>
            <TR>
                <TH>4</TH>
                <TD COLSPAN="4"><INPUT TYPE="TEXT" SIZE=70>
            </TR>
            <TR>
                <TH>5</TH>
                <TD COLSPAN="4"><INPUT TYPE="TEXT"  SIZE=70>
                        </TR>
        </TABLE>
        </FORM>
      </BODY>

</HTML>
```

OUTPUT:


biodata - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address C:\Documents and Settings\sitams.INTERNET12.000\Desktop\biodata.html Go Links
Done My Computer

biodata

NAME

DOB

RELIGION

ADDRESS street

town

dist

state

PHONE office

residance

EDUCATIONAL QUALIFICATION

degree	university	month&year	grade/marks
1			
2			
3			
4			
5			

EXERCISE NO. 9: CASCADING STYLE SHEET ILLUSTRATION

Aim:-To illustrate the cascading Stylesheets

Procedure:-

1. **USE OF DIFFERENT FONT STYLE AND COLORS**

   step1:-Write an external CSS file called test.css which consists the new styles for h1, h2 and p tags

   Step2:-Save the file with .css extension.

   Step3:-Write an html code that links with the external CSS file and save it with .html extension

   Step4:-Open html in any browser like fire fox, explorer to view the new styles of <h1>,<h2> and <p> tags

2. **SETTING BACKGROUND IMAGE.**

   Step1:-write an internal CSS for Body tag ,**the CSS** should include the background image of the web page

   Step3:- Save the file with .html extension.

   Step5:-Open the html file if any of the browser for viewing the results.

3. **DEFINING STYLES FOR LINKS**

   step1:-write the html code which consists of ‘link’ h1,h2 and p.

   Step2:-write the styles in test.css document.

   Step3:-save the .html file extension.

   Step4:- open the html file if any of the browser for results.

4. **WORKING WITH LAYERS**

   Step1:-write an external CSS file , which includes different colors at different states of anchor tag

   Step2:-save the file with .css extension

   Step3:- write an html file that links the .CSS file and save the html file with .html or .htm extension

   Step4:- open the html file in any browser to view output.

5. **CUSTOMIZED CURSOR**

   Step1:-write an internal CSS for cursor styles with anonymous class

   Step2:-Save the file with .html extension

   Step3:-Open html file using any browser to view output.

CASCADING STYLE SHEET ILLUSTRATIONS:

Task 9.1

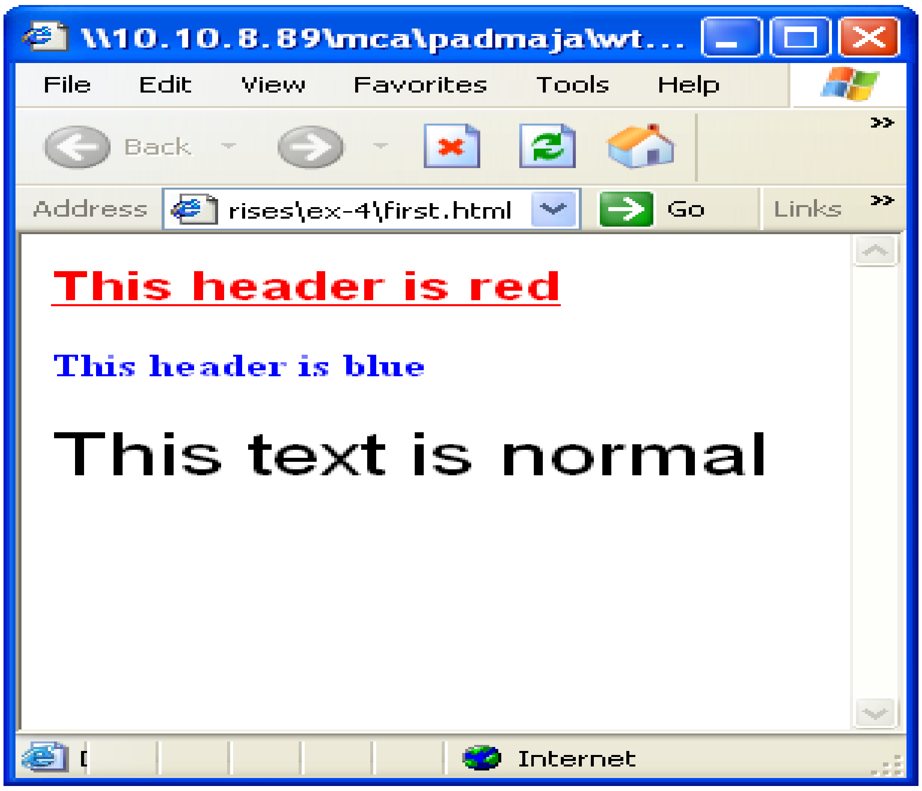
<!—USE OF DIFFERENT FONT,STYLES AND COLORS→

```
<html>
        <head>
                <link rel="stylesheet" type="text/css" href="test1.css"/>
        </head>
        <body>
                <h1>This header is red</h1>
                <h2>This header is blue</h2>
                <p>This text is normal</p>
        </body>
</html>
```

Test.css

```
h1{color:red;font-size:22px;font-family:arial;text-decoration:underline}
h2{color:blue;font-size:16px}
p{font-family:arial;font-size:30px}
```

OUTPUT



This header is red

This header is blue

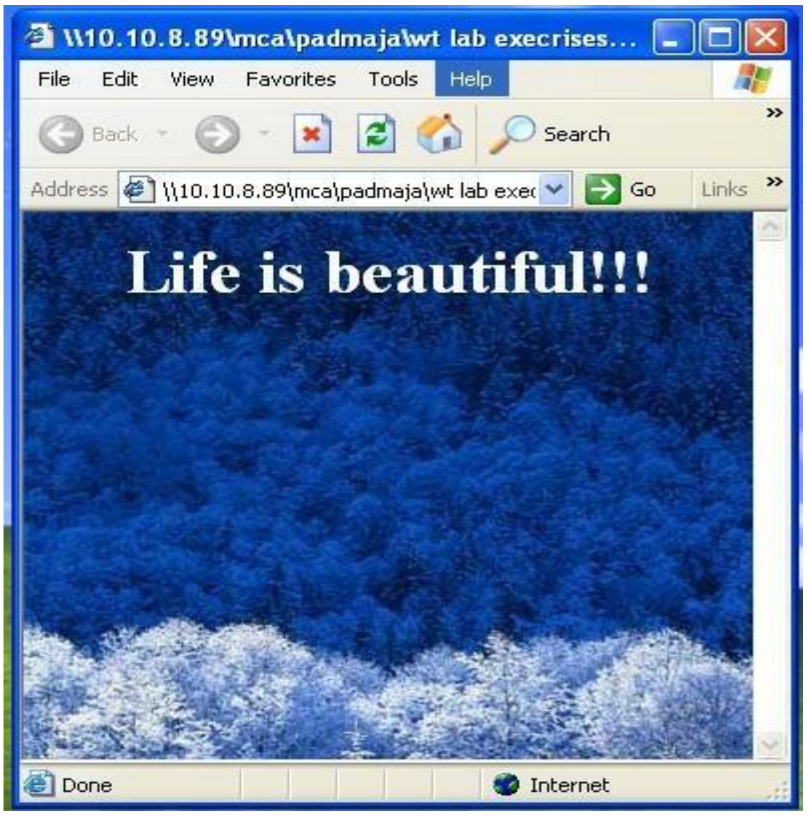
This text is normal

Task 9.2

<!—SETTING BACKGROUND IMAGE ..>

```
<html>
	<head>
		<style type="text/css">
		body
		{
			background-image:url("winter.jpg");
			background-repeat:no-repeat
		}
		h1
		{
			color:white;
			font-size:35px;
		}
		</style>
	</head>
	<body>
		<center><h1>Life is beautiful!!!</h1></center>
	</body>
</html>
```

OUTPUT


\\10.10.8.89\mca\padmaja\wt lab exercises...
File Edit View Favorites Tools Help
Back Search
Address \\10.10.8.89\mca\padmaja\wt lab exe Go Links
Done
Internet

Life is beautiful!!!

Task 9.3

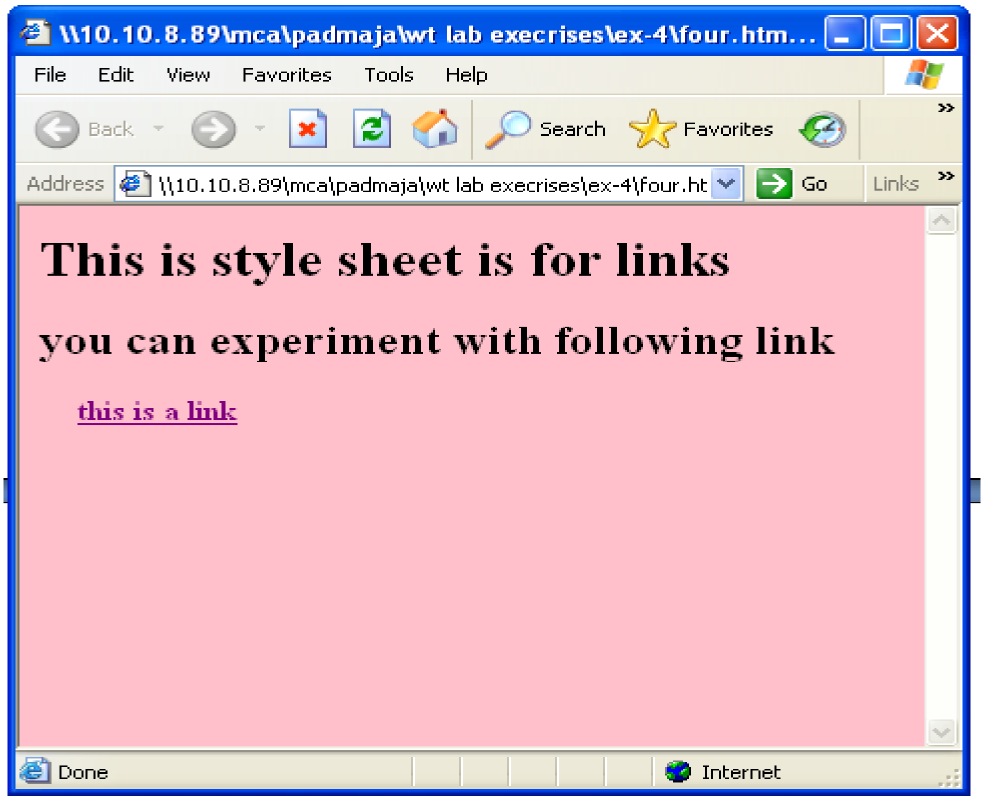
<!—DEFINING STYLES FOR LINKS..>

```
<html>
        <head>
                <link rel="stylesheet" type="text/css" href="test4.css"/>
        </head>
        <body>
                <h1>This is style sheet is for links</h1>
                <h2>you can experiment with following link</p>
                <p><a href="http://www.google.co.in">this is a link</a></p>
        </body>
</html>
```

test4.css

```
body{background-color:pink}
h1{color:black;font-size:22px}
p{font-size:12}
a:link{color:blue}
a:visited{color:purple}
a.hover{color:red;text-decoration:underline}
a.active{color:green}
```

OUTPUT


\\10.10.8.89\mca\padmaja\wt lab execrises\ex-4\four.htm...

Address \\10.10.8.89\mca\padmaja\wt lab execrises\ex-4\four.ht

This is style sheet is for links

you can experiment with following link

this is a link

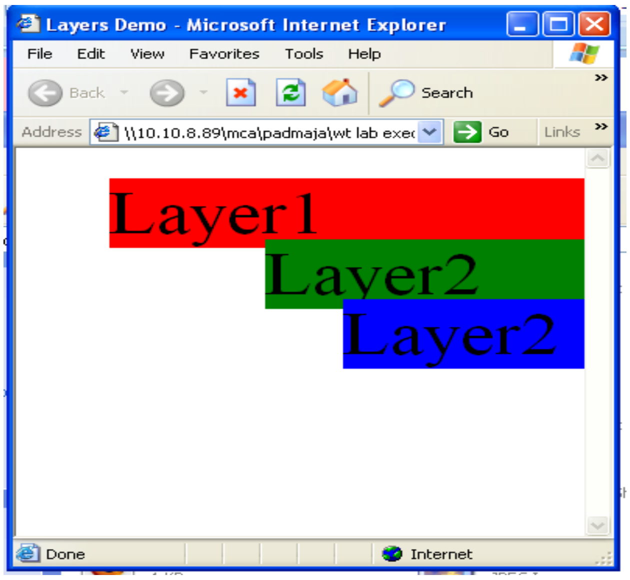
Done Internet

Task 9.4

<!— WORKING WITH LAYERS ..>

```
<html>
        <head>
        <title>Layers Demo</title>
        </head>
        <body>
                <div style="position:relative;
                        font-size:50px;
                        left:50;
                        top:10;
                        Background-color:red;
                        z-index:1;">Layer1</div>
                <div style="position:relative;
                        font-size:50px;
                        left:150;
                        top:3;
                        Background-color:green;
                        z-index:2;">Layer2</div>
                <div style="position:relative;
                        font-size:50px;
                        left:200;
                        top:-5;
                        Background-color:blue;
                        z-index:3;">Layer2</div>
        </body>
</html>
```

OUTPUT

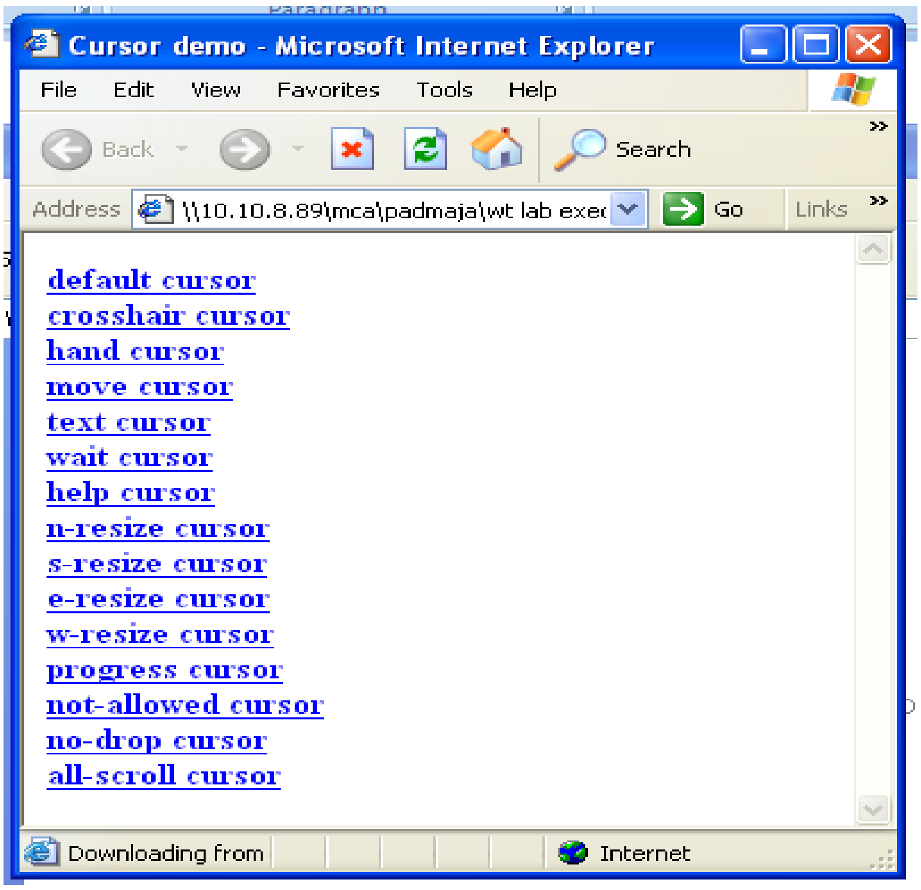

Layers Demo - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search
Address \\10.10.8.89\mca\padmaja\wt lab exe
Go Links
Layer1
Layer2
Layer2
Done
Internet

Task 9.5

<!— CUSTOMIZED CURSOR ..>

```
<html>
        <head>
                <title>Cursor demo</title>
                <style type="text/css">
                .link1{cursor:default}
                .link2{cursor:crosshair}
                .link3{cursor:hand}
                .link4{cursor:move}
                .link5{cursor:text}
                .link6{cursor:wait}
                .link7{cursor:help}
                .link8{cursor:n-resize}
                .link9{cursor:s-resize}
                .link10{cursor:e-resize}
                .link11{cursor:w-resize}
                .link12{cursor:progress}
                .link13{cursor:not-allowed}
                .link14{cursor:no-drop}
                .link15{cursor:all-scroll}
                </style>
        </head>
        <body>
                <b><a href="test.html" class="link1">default cursor</a><br/>
                <b><a href="test.html" class="link2">crosshair cursor</a> <br/>
                <b><a href="test.html" class="link3">hand cursor</a><br/>
                <b><a href="test.html" class="link4">move cursor</a><br/>
                <b><a href="test.html" class="link5">text cursor</a><br/>
                <b><a href="test.html" class="link6">wait cursor</a><br/>
                <b><a href="test.html" class="link7">help cursor</a><br/>
                <b><a href="test.html" class="link8">n-resize cursor</a><br/>
                <b><a href="test.html" class="link9">s-resize cursor</a><br/>
                <b><a href="test.html" class="link10">e-resize cursor</a><br/>
                <b><a href="test.html" class="link11">w-resize cursor</a><br/>
                <b><a href="test.html" class="link12">progress cursor</a><br/>
                <b><a href="test.html" class="link13">not-allowed cursor</a><br/>
                <b><a href="test.html" class="link14">no-drop cursor</a> <br/>
                <b><a href="test.html" class="link15">all-scroll cursor</a><br/>
        </body>
</html>
```

OUTPUT


Cursor demo - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back
Search
Address \\10.10.8.89\mca\padmaja\wt lab exe
Go
Links
Downloading from
Internet

default cursor
crosshair cursor
hand cursor
move cursor
text cursor
wait cursor
help cursor
n-resize cursor
s-resize cursor
e-resize cursor
w-resize cursor
progress cursor
not-allowed cursor
no-drop cursor
all-scroll cursor

EXERCISE NO. 10: DESIGNING AONLINE BOOK STORE

Aim:-To design the following static webpage required for an online book store website.

1. HOME PAGE:

The static home page must contain 3 frames

Top frame: logo and the college name and links to home page , login page, registration page, catalogue page and cart page [the description of these pages will be given below]

Left frame: Atleast 4 links for navigation, which will display the catalogue of respective links.

Example:when you click the links cse the catalogue for cse books should be displayed in right frame.

Right frame: The pages to the links in the left name frame must be loaded here initially this page contains description of the website.

LOGO	**WEBSITE NAME**			
HOME	**LOGIN**	**REGISTRATION**	**CATALOGUE**	**CART**
CSE ECE EEE CIVIL	**Description of the website**			

2. LOGIN PAGE:

This page looks like below.

LOGO	**WEBSITE NAME**			
HOME	**LOGIN**	**REGISTRATION**	**CATALOGUE**	**CART**
CSE ECE EEE CIVIL	**LOGIN** **PASSWORD**	[ ] [ ] submit Reset		

3. CATALOGUE PAGE:

The catalogue page should contain the details of all books available in website in the table the details should contain following.

1.snapshot of coverpage

2. Author name

3. publisher

4. price

5.Add to cart Button

Procedure:-

1. Write the html code for designing the following table and name it as Menu.html.

C	**WEBSITE NAME**			
HOME	**LOGIN**	**REGISTRATION**	**CATALOGUE**	**CART**

2. Write an html code that displays the courses and solve it as course.html

CSE
ECE
EEE

3. Write other html code which describes about the website and name it as desc.html

Description of the website

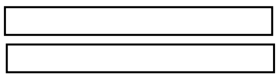
image

Click any one in above fig

4. Write another html code to display the following login page and save it as login.html

LOGIN	
PASSWORD	
	submit Reset

5. Divide the screen into horizontal frame i.e 30%,70% as shown below and name them as top frame and bottom frame.



6. Load menu.html in the first frame called top-frame

7. Divide bottom frame into 2 vertical frames and name them as bottom left and right ass shown below

8. Load courses.html in bottom left frame as

9. Load description.html in bottom right frame when home option is clicked as

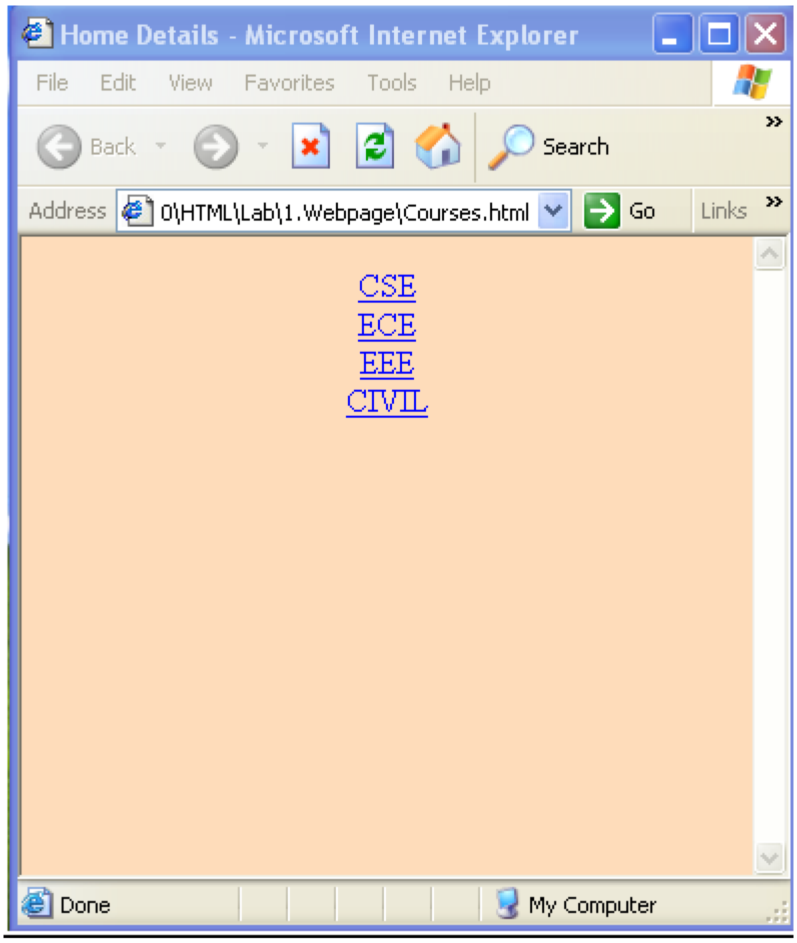
10.Load login.html in bottom right frame when login option is clicked as

11. Load catalogue.html in bottom right frame when catalogue option is clicked as

courses.html

```
<html>
        <head>
             <title>Home Details</title>
        </head>
        <body bgcolor="#fedcba">
                <center>
                     <a href="Cse.html" target="Bottom Right">CSE</a><br>
                     <a href="Ece.html" target="Bottom Right">ECE</a><br>
                     <a href="Eee.html" target="Bottom Right">EEE</a><br>
           <a href="Civil.html" target="Bottom Right">CIVIL</a>
                </center>
        </body>
</html>
```

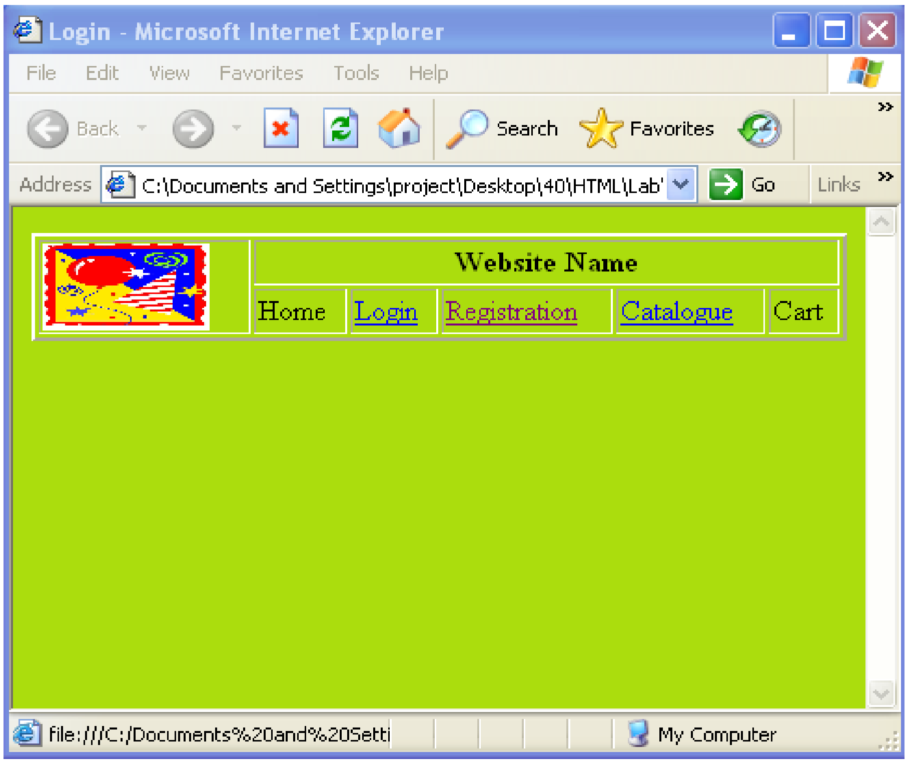
OUTPUT


Home Details - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search
Address 0\HTML\Lab\1.Webpage\Courses.html Go Links
CSE
ECE
EEE
CIVIL
Done My Computer

menu.html

```
<html>
        <head>
                 <title>Login</title>
          </head>
        <body bgcolor="#abdd0d">
                <table border="2" width="100%">
                <tr>
                     <td rowspan="2"><imgsrc="3.jpg" width=90 height=50></td>
                     <thcolspan="5">Website Name</th>
                 </tr>
                  <tr>
                        <td>Home</td>
                        <td><a href="Login.html" target="Bottom Right">Login</a></td>
                        <td><a href="Registration.html" target="Bottom
                               Right">Registration</a></td>
                        <td><a href="Catalogue.html" target="Bottom
                               Right">Catalogue</a></td>
                        <td>Cart</td>
                  </tr>
                </table>
           </body>
</html>
```

OUTPUT


Login - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address C:\Documents and Settings\project\Desktop\40\HTML\Lab' Go Links
file:///C:/Documents%20and%20Setti
My Computer

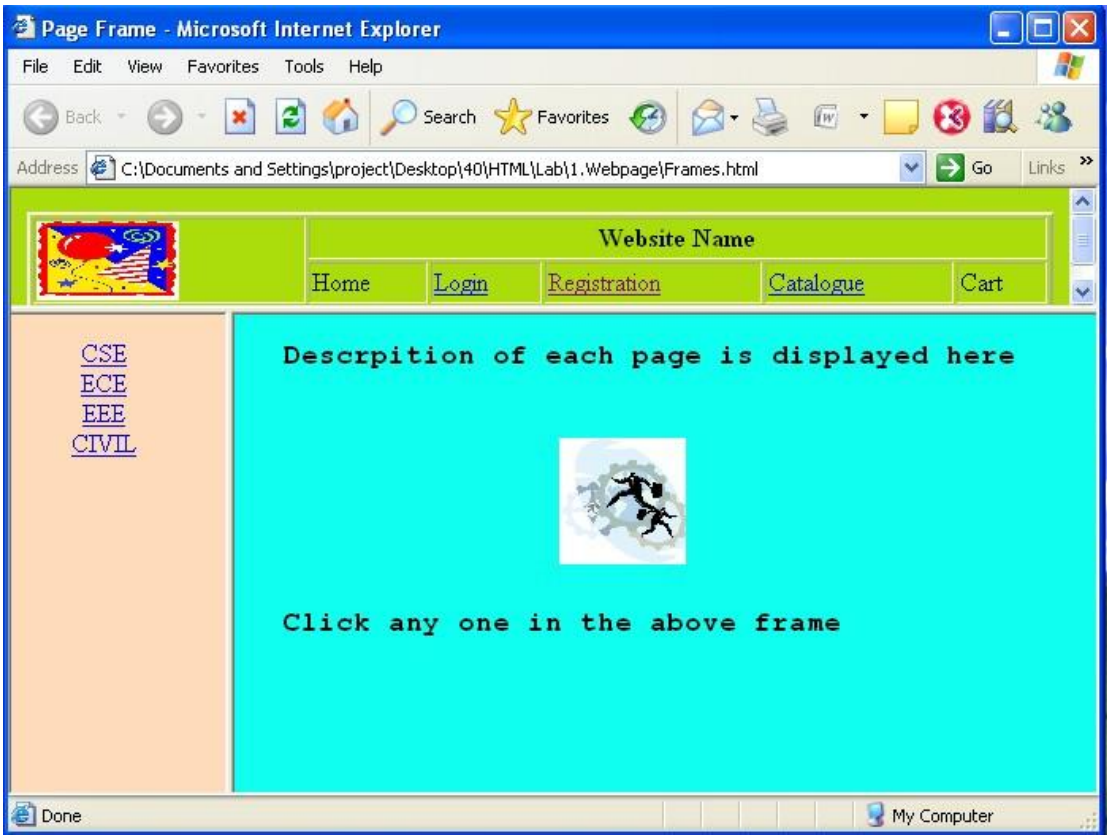
Website Name

Home Login Registration Catalogue Cart

Frames.html

```
<html>
        <head>
             <title>Page Frame</title>
        </head>
        <frameset rows="20%,80%">
                     <frame src="menu.html" name="Top">
                          <frameset cols="20%,80%">
                               <frame src="Courses.html" name="Bottom Left">
                               <frame src="Description.html" name="Bottom Right">
                          </frameset>
        </frameset>
</html>
```

OUTPUT


Page Frame - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address C:\Documents and Settings\project\Desktop\40\HTML\Lab\1.Webpage\Frames.html
Go Links
Done
My Computer

Website Name

Home Login Registration Catalogue Cart

CSE
ECE
EEE
CIVIL

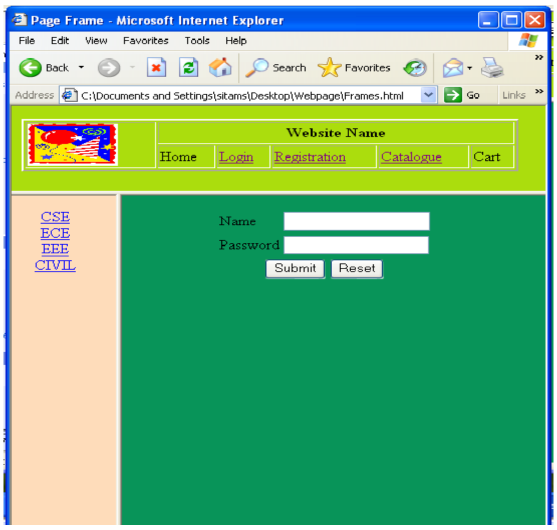
Descrpition of each page is displayed here

Click any one in the above frame

LOGIN.HTML

```
<html>
    <head>
        <title>Login</title>
    </head>
    <body bgcolor="#089459">
      <form name="login" Action:\cgi-bin\mycgi-pl"     method="post">
          <table align=center>
              <tr>
                  <td>Name</td>
                  <td><input type="text" name="tname"></td>
              </tr>
              <tr>
                  <td>Password</td>
                  <td><input type="Password" name="pass"></td>
              </tr>
              <tr>
                  <td colspan="2" align=center><input type="Submit"
                                name="Submit"
                  <input type="Reset" name="Reset" value="Reset">
              </tr>
          </table>
      </form>
    </body>
</html>
```

OUTPUT


Page Frame - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address C:\Documents and Settings\sitams\Desktop\Webpage\Frames.html Go Links
Website Name
Home Login Registration Catalogue Cart
CSE
ECE
EEE
CIVIL
Name
Password
Submit Reset

JAVA SCRIPT

EXERCISE NO. 11: DESIGNING A REGISTRATION FORM WITH VALIDATION

Aim:-To create a registration form with following fields

1. Name(Text field)
2. Password(Password field)
3. E-mail(Text field)
4. Phone number(Text field)
5. Gender(radio button)
6. Date of Birth(3 select boxes)
7. Languages known(check boxes)
8. Address(text area)

Add validate the following fields of above page.

1. Name (Name should contains alphabets and length should not be less than 6 characters)
2. Pass word (pass word should not be less than 6 characters length)
3. Email-id(should not contain any invalid and must follow the standard pattern name@domain.com)
4. Phone number(Phone number should not contain 10 digits only).

Procedure:-

1. Open the html and head tag.
2. In the <script>write validation function for name, password, email-id, Phone number etc.
3. Each validation function
   i). write a Regular expression corresponding to that function
   ii). Compare the entered data with the regular expression
   iii) if both are not match print error message else send data to the destination.
4. Close the <script> and <head> and open <body>
5. Use the <from>,<input> to display the above specified fields.
6. In the <input> call the corresponding validation fields using events.
7. Close <body> and <html>
8. Save the file with .html extension
9. Open the html file any browser to view the contents of registration form.

REGISTRATION FORM (with validation):

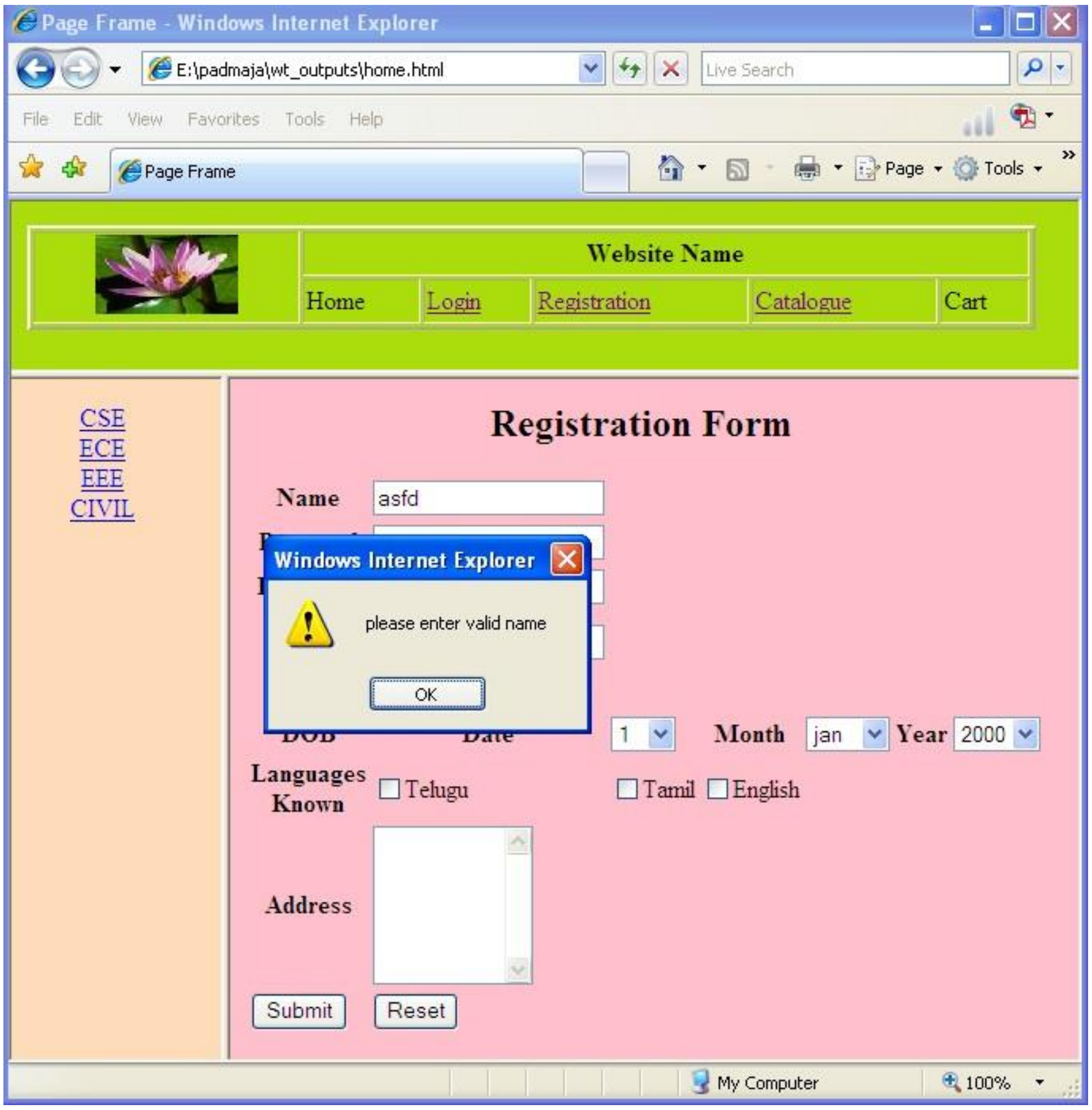
Registration.html

```
<html>
        <head>
             <script>
                     function name_validate()
                     {
                     var name=document.forms[0].elements[0].value;
                     name_re=/^[A-Z][A-Za-z]{6,}/g;
                     if(!name.match(name_re))
                     alert("please enter valid name");
                     }

                     function pwd_validate()
                     {
                     var passwd=document.forms[0].elements[1].value;
                     pwd=/^[A-Z]\w{6,}/g;
                     if(!passwd.match(pwd))
                     alert("please enter valid password");
                     }
                     function mail_validate()
                     {
                     email=document.forms[0].elements[2].value;
                     email_reg=/^[A-Za-z][A-Za-z0-9]+@[A-Za-z0-9,.-]+\.[a-zA-Z]{3}/;
                     if(!email.match(email_reg))
                     alert("please enter valid mail id");
                     }

                     function ph_validate()
                     {
                     phone=document.forms[0].elements[3].value;
                     ph_re=/\d{10}/;
                     if(!phone.match(ph_re))
                     alert("please enter valid phone number");
                     }

             </script>
</head>
<body bgcolor="pink">
       <form method="post">
              <h2 align="center">Registration Form</h2>
              <table border="0" width=100% align="center">
                     <tr>
                               <th>Name</th>
                               <td><input type="text" name="uname"
                                         onBlur="name_validate()">
                               </td>
                     </tr>
                     <tr>
                               <th>Password</th>
```

```
                <td><input type="password" name="pwd"
                                onBlur="pwd_validate()"></td>
        </tr>
        <tr>
                <th>Email_ID</th>
                <td><input type="text" name="eml"
                        onBlur="mail_validate()"></td>
        </tr>
        <tr>
                <th>Phone Number</th>
                <td><input type="text" name="pno"
                        onBlur="ph_validate()"></td>
        </tr>
        <tr>
                <th>Gender</th>
                <td><input type="radio" name="gender">Female
                        <input type="radio"
                                name="gender">Male</td>
        </tr>
        <tr>
                <th>DOB</th>
                <th>Date</th>
                <td><select name="date">
                        <option>1</option>
                        <option>2</option>
                        <option>3</option>
                        <option>4</option>
                        <option>5</option>
                        <option>6</option>
                        <option>7</option>
                        <option>8</option>
                        <option>9</option>
                        <option>10</option>
                        <option>11</option>
                        <option>12</option>
                        <option>13</option>
                        <option>14</option>
                        <option>15</option>
                        <option>16</option>
                        <option>17</option>
                        <option>18</option>
                        <option>19</option>
                        <option>20</option>
                        <option>21</option>
                        <option>22</option>
                        <option>23</option>
                        <option>24</option>
                        <option>25</option>
                        <option>26</option>
                        <option>27</option>
                        <option>28</option>
                        <option>29</option>
```

```
				<option>30</option>
				<option>31</option>
		</select></td>
		<th>Month</th>
		<td><select name="month">
				<option>jan</option>
				<option>feb</option>
				<option>mar</option>
				<option>apr</option>
				<option>may</option>
				<option>jun</option>
				<option>jul</option>
				<option>aug</option>
				<option>sep</option>
				<option>oct</option>
				<option>nov</option>
				<option>dec</option>
				</select></td>
		<th>Year</th>
				<td><select name="year">
						<option>2000</option>
						<option>2001</option>
						<option>2002</option>
						<option>2003</option>
						<option>2004</option>
						<option>2005</option>
						<option>2006</option>
						<option>2007</option>
						<option>2008</option>
						<option>2009</option>
						<option>2010</option>
						<option>2011</option>
						<option>2012</option>
						<option>2013</option>
						<option>2014</option>
				</select></td>
		</tr>
		<tr>
				<th>Languages Known</th>
				<td><input type="checkbox">Telugu</td>
				<td><input type="checkbox">Tamil</td>
				<td><input type="checkbox">English</td>
		</tr>
		<tr>
				<th>Address</th>
				<td><textarea name="address" rows="6"
						cols="10"></textarea></td>
		</tr>
		<tr>
				<td><input type="submit" value="Submit"></td>
				<td><input type="Reset" value="Reset"></td>
		</tr>	</table></form></body></html>
```

OUTPUT:


Page Frame - Windows Internet Explorer
E:\padmaja\wt_outputs\home.html
Live Search
File Edit View Favorites Tools Help
Page Frame
Page Tools
My Computer
100%

Website Name

Home Login Registration Catalogue Cart

CSE
ECE
EEE
CIVIL

Registration Form

Name asfd

Windows Internet Explorer

please enter valid name

OK

DOB Date 1 Month jan Year 2000

Languages Known ☐ Telugu ☐ Tamil ☐ English

Address

Submit Reset

EXERCISE NO. 12: STRING MANIPULATION FUNCTION IN JAVA SCRIPT

Aim:-To Perform String Manipulations in Java Script

Procedure:-

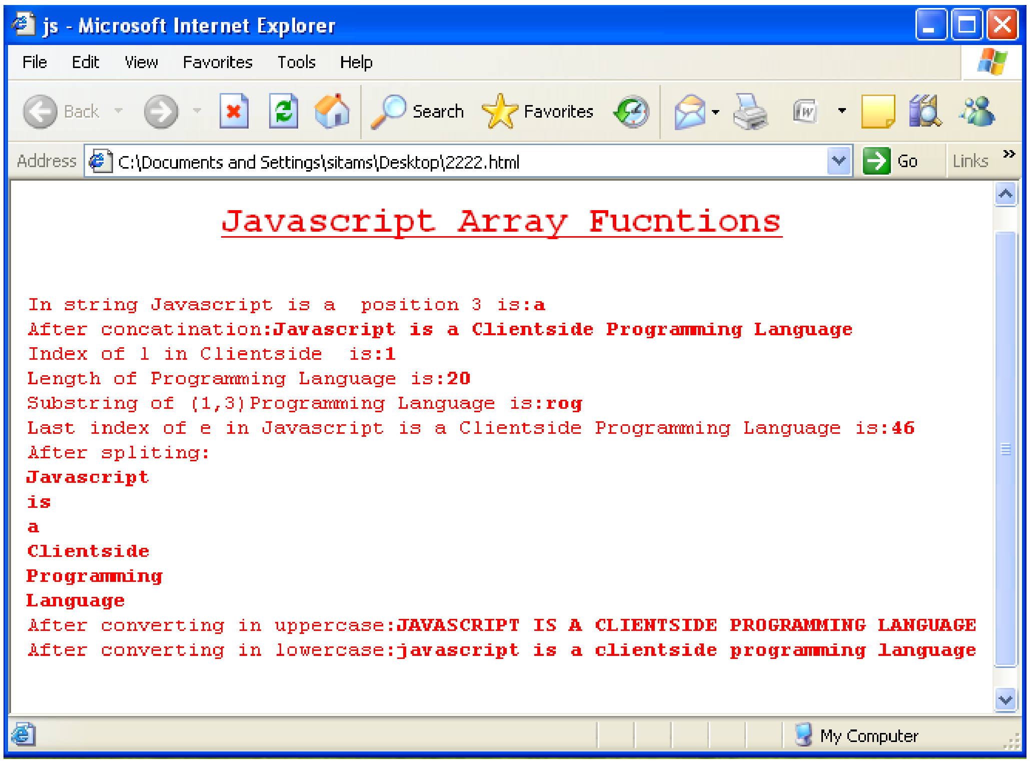
Step1:-Take one or more strings and perform the following function on string.

1. **Char at(index):**Returns the character which is at position specified in index.
2. **Concat ("string",["string"[."string"]]):** concates the string which are passed as parameter.
3. **Index of("search",[offset]):**String is searched for the string in 1st parameter.
4. **Last indexof("search",[offset]):**It works at exactly as some thing of index of but work in backwards along the string offset works exactly as that of index of.
5. **Length:** Returns no.of characters in the string.
6. **Split(seperatior[limit]):**this function breaks the string whenever it counters the character passed in a 1 st parameter the 2nd parameter which is an integer value indicates how many pieces are stored in array.
7. **Substr(index,[length]):**this function returns the substring which starts at the character indicated at the index. The substring continuous either indicated by a length parameter.
8. **Substring (index1,[index2]):**This function returns the substring which starts at the character indicated at the index1 to end of index2.
9. **To lowercase():**This function converts the string case from upper case.
10. **To upper case():**This function converts the string from lower to upper case.

JAVASCRIPT STRING MANIPULATION FUNCTIONS:

```
<html>
    <head>
        <title>String Manipulation</title>
    </head>
    <body text="red">
        <pre>
<h2 align="center"><u>Javascript Array Fucntions</u></h2>
        <script>
              var str=prompt("Enetr the string1");
              var str2=prompt("Enetr the string2");
              var str3=prompt("Enter the string3");
              var pos=prompt("Enter the position u want to display in string1 ");
              var res=str.charAt(pos);
              document.writeln("<br/>"+"In string "+str+" position "+pos+"
                        is:"+"<b>"+res+"</b>");
              document.writeln("AfterConcatination:"+"<b>"+str.concat(str2,str3)+"</
                b>");
              var i=str2.indexOf("l");
              document.writeln("<br>Index of l in "+str2+" is:<b>"+i+"</b>");
              document.writeln("<br>Length of "+str3+" is:<b>"+str3.length+"</b>");
              var st=str.concat(str2,str3);
              document.writeln("<br>Substring of (1,3)"+str3+"
                                          is:<b>"+str3.substr(1,3)+"</b>");
              document.writeln("<br>Last index of e in "+st+"
                                        is:<b>"+st.lastIndexOf("e")+"</b>");
              document.writeln("<br>After spliting:");
              var stt=st.split(" ");
              for(var i=0;i<stt.length;i++)
              document.writeln("<br><b>"+stt[i]+"</b>");
              document.writeln("<br>After converting in
                                     uppercase:<b>"+st.toUpperCase()+"</b>");
              document.writeln("<br>After converting in
                       lowercase:<b>"+st.toLowerCase()+"</b>");
        </script>
        </pre>
    </body>
</html>
```

OUTPUT:


js - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address C:\Documents and Settings\sitams\Desktop\2222.html
Go Links
My Computer

Javascript Array Fucntions

```
In string Javascript is a  position 3 is:a
After concatination:Javascript is a Clientside Programming Language
Index of l in Clientside  is:1
Length of Programming Language is:20
Substring of (1,3)Programming Language is:rog
Last index of e in Javascript is a Clientside Programming Language is:46
After spliting:
Javascript
is
a
Clientside
Programming
Language
After converting in uppercase:JAVASCRIPT IS A CLIENTSIDE PROGRAMMING LANGUAGE
After converting in lowercase:javascript is a clientside programming language
```

EXERCISE NO. 13: MATHEMATICAL FUNCTION IN JAVA SCRIPT

Aim:- To Perform Java Script Mathematical Functions

Procedure:-

Step1:- Take one or more numeric values and then perform the following function on the numeric values.

1. **abs:**Returns absolute value of –ve to +ve numbers

   Syntax:abs(value)

2. **ceil:** Returns the smallest integer which is greater than or equal to value passed in

   Syntax: ceil(value).

3. **Floor:** Returns the largest integer which is smaller than or equal to number passed in

   Syntax: floor(value)

4. **Max:**Returns the largest value of its arguments

   Syntax:max(value1, value2)

5. **Min:** Returns the smallest value of its arguments

   Syntax: min(value1, value2)

6. **Pow:** Returns the result raising value of power.

   Syntax: pow(value, power)

7. **Round:** Returns the value of rounding its argument to the nearest integer

   Syntax: round(value)

8. **Sqrt:** Returns the square root of value

   Syntax: sqrt(value)

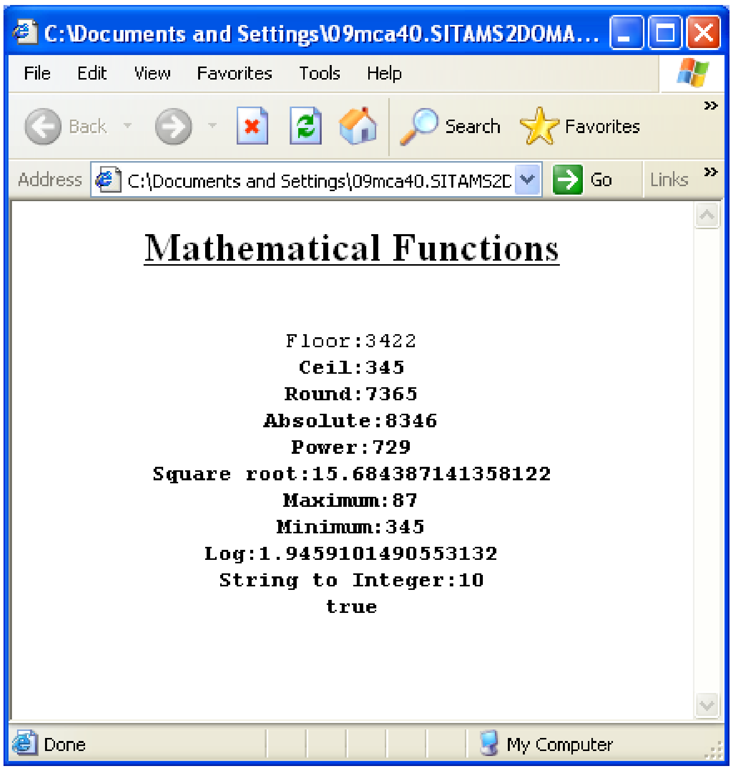
Step2: Save file with .html extension.

Step3: Open the html file in any of the browser to view the output of the webpage.

JAVASCRIPT MATHEMATICAL FUNCTIONS:

```
<html>
<body>
        <center>
                <h2><u>Mathematical Functions</u></h2>
        <pre>
                <script>
                        document.writeln("<br/>"+"Floor:"+Math.floor(3422.74));
                        document.writeln("<b>"+"Ceil:"+Math.ceil(344.45));
                        document.writeln("<b>"+"Round:"+Math.round(7364.87));
                        document.writeln("<b>"+"Absolute:"+Math.abs(-8346));
                        document.writeln("<b>"+"Power:"+Math.pow(3,6));
                        document.writeln("<b>"+"Square root:"+Math.sqrt(246));
                        document.writeln("<b>"+"Maximum:"+Math.max(74,87));
                        document.writeln("<b>"+"Minimum:"+Math.min(345,958));
                        document.writeln("<b>"+"Log:"+Math.log(7));
                        var res=parseInt(1010,2);
                        document.writeln("<b>"+"String to Integer:"+res);
                        var res1=isNaN()
                        document.writeln(res1);
                </script>
        </pre>
        </center>
</body>
</html>
```

OUTPUT:



C:\Documents and Settings\09mca40.SITAMS2DOMA...
File Edit View Favorites Tools Help
Back Search Favorites
Address C:\Documents and Settings\09mca40.SITAMS2D Go Links
Done My Computer

Mathematical Functions

```
Floor:3422
Ceil:345
Round:7365
Absolute:8346
Power:729
Square root:15.684387141358122
Maximum:87
Minimum:345
Log:1.9459101490553132
String to Integer:10
true
```

EXERCISE NO. 14: ARRAY FUNCTIONS IN JAVA SCRIPT

Aim:-To Illustrate Java Script Array Functions

Procedure:-

Step1: Take one or more numeric values and perform the following on string.

1. **Concat(array2[,array][,array n])):** A list of array is concatenated on the end of array
2. And a new array is returned.
   Syntax: var first=[1,2,3];
   var second =[1,2,3];
   var third =first concat (second,third);
3. **Join(string):**Array elements are join to gether as string it does not need looping statement to view array elements.
   Syntax: var first =[1,2,3];
   var res =first join(",");
4. **Pop():** This function removes last element from the array.
   Syntax: var first =[1,2,3];
   var res =first.pop( );
5. **Push(element1[,element2[,element n]]):**Add a list of elements at the end of the array.
   Syntax:var first =[1,2];
   var res =first.push(4,5,9);
6. **Reverse():** This function swaps all elements in the array. So that was last in first vicevarsa.
   Syntax:reverse();
7. **Shift():** Removes the first element in the array.
   Syntax: shift();
8. **Slice():**The slice function extract a range of element from a array.
   Syntax: slice(start[, finish]);
9. **Sort():** To sort the array elements.
   Syntax:sort()
10. **Unshift():** To insert the element at the beginning of array.
    Syntax: unshift(element1[,element2[,element n]]);
11. **Splice():**This function alters an array by removing some elements x at the same time same element.
    Syntax:splice(index,number[element1[,element2[,element n]]]);

Step2: Save file with .html extension.

Step3:open the html file using any browser to view the output of the webpage.

JAVASCRIPT ARRAY FUNCTIONS:

```
<html>
    <head>
        <title>Array functions demo</title>
    </head>
    <body>
        <h3 align = "center" > Illustration of Array Functions </h3>
        <pre>
        <script>
            //concat function: combines array elements
                var first=[1,2,3];
                var second=[4,5,6];
                var third=[7,8];
                var res=first.concat(second,third);
                document.writeln("<br/>"+"First Array Elements are : "
                                +first.join(","));
                document.writeln("Second Array Elements are : "
                                +second.join(","));
                document.writeln("Third Array Elements are : "
                                +third.join(","));
                document.writeln("After concatenating the array elements are:");
                for(var i = 0;i <res.length;i++)
                    document.write(res[i]);
            //Join function: combines array elements as string
                var a=[1,2,3,4,5,6,7,8,9];
                var str=a.join(":");
                document.writeln("<br/>"+"Array elements as
                        a string:"+str);//1:2:3:4:5:6:7:8:9
            //pop function:Delete elements at the end of array
                a.pop();
                var str1=a.join(":");
                document.writeln("The Array Elements after
                        poping an Element:" + str1);//1:2:3:4:5:6:7:8
            //push functon: Inserts an element at the end of array
                a.push(-1,0);
                var str2=a.join(":");
                document.writeln("The Array Elements after
                        pushing elements:" +str2);//-1:0:1:2:3:4:5:6:7:8
            //reverse function: reverse the array
                a.reverse();
                var str3=a.join(":");
                document.writeln("The Array Elements in Reverse
                                Order is:"+str3);//8:7:6:5:4:3:2:1:0:-1
            //shift function: Remove an element at the front of array
                a.shift();
                var str4=a.join(":");
                document.writeln("The array after shift function
                        is:"+str4);//7:6:5:4:3:2:0:-1
            //unshift function: Insert an element at the front of array
```

```
                a.unshift(9);
                var str5=a.join(":");
                document.writeln("The Array Elements  after
                                unshift is:"+str5);//9:7:6:5:4:3:2:1:0:-1
            //slice function: Extract elements
                        var b=a.slice(2,4);
                        var str6=b.join(";");
                        document.writeln("The Array Elements after slice
                                function is:"+str6);//9:7:4:3:2:1:0:-1
            //sort function:sort elements in dictionary order
                        a.sort();
                        var str7=a.join(":");
                        document.writeln("The Array Elements after
                                sorting:"+str7);//-1:0:1:2:3:4:7:9
            //splice function:insert elements into at specified position
                        a.splice(5,10);
                        var str8=a.join(":");
                        document.writeln("The Array elements after splice
                                function is:"+str8);
                </script>
        </pre>
      </body>
</html>
```

OUTPUT:

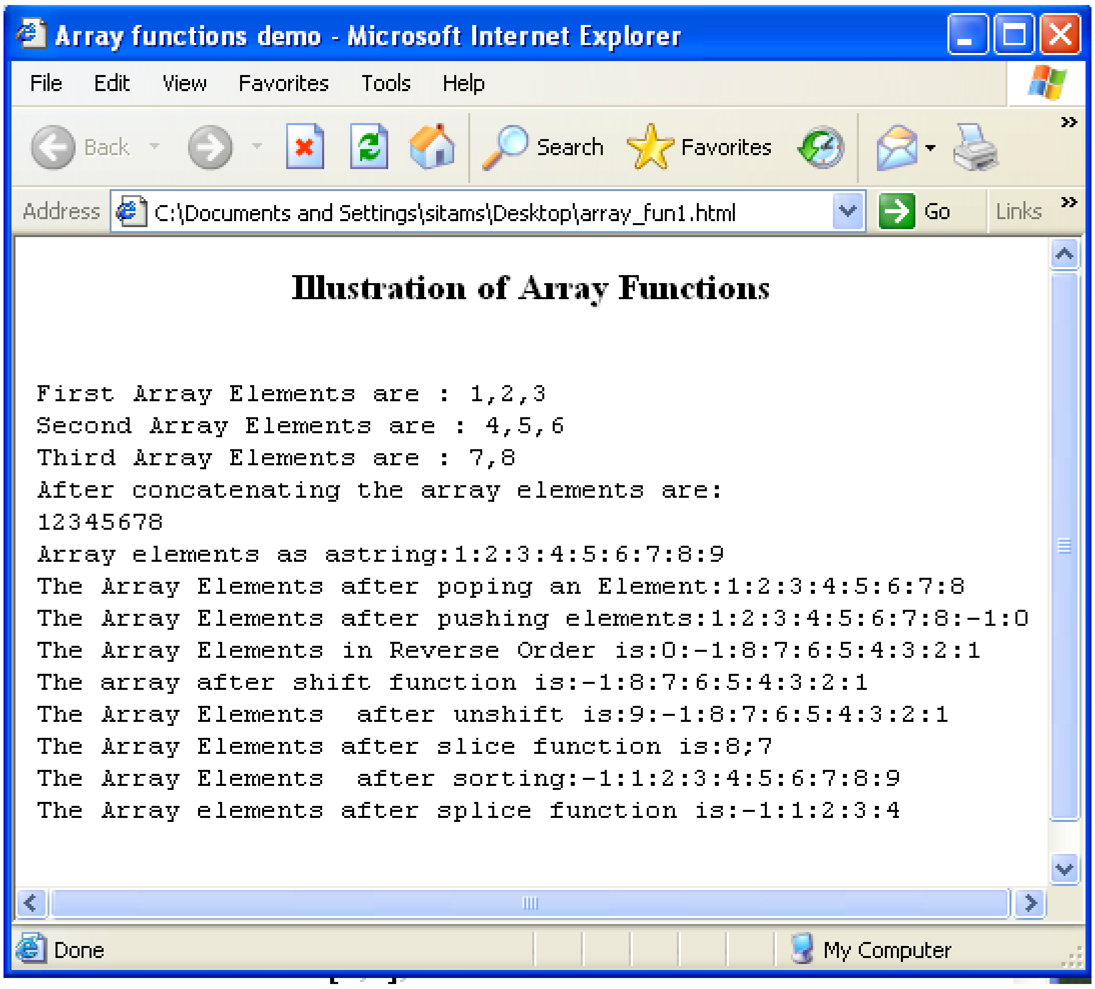

Array functions demo - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address C:\Documents and Settings\sitams\Desktop\array_fun1.html
Go Links
Done
My Computer

Illustration of Array Functions

```
First Array Elements are : 1,2,3
Second Array Elements are : 4,5,6
Third Array Elements are : 7,8
After concatenating the array elements are:
12345678
Array elements as astring:1:2:3:4:5:6:7:8:9
The Array Elements after poping an Element:1:2:3:4:5:6:7:8
The Array Elements after pushing elements:1:2:3:4:5:6:7:8:-1:0
The Array Elements in Reverse Order is:0:-1:8:7:6:5:4:3:2:1
The array after shift function is:-1:8:7:6:5:4:3:2:1
The Array Elements  after unshift is:9:-1:8:7:6:5:4:3:2:1
The Array Elements after slice function is:8;7
The Array Elements  after sorting:-1:1:2:3:4:5:6:7:8:9
The Array elements after splice function is:-1:1:2:3:4
```

EXERCISE NO. 15: FACTORIAL (NON-RECURSIVE)

Aim: To compute factorial value using non-Recursive Function in java script.

Procedure:-

Step1: Define factorial function to compute factorial value in script tag of head section.

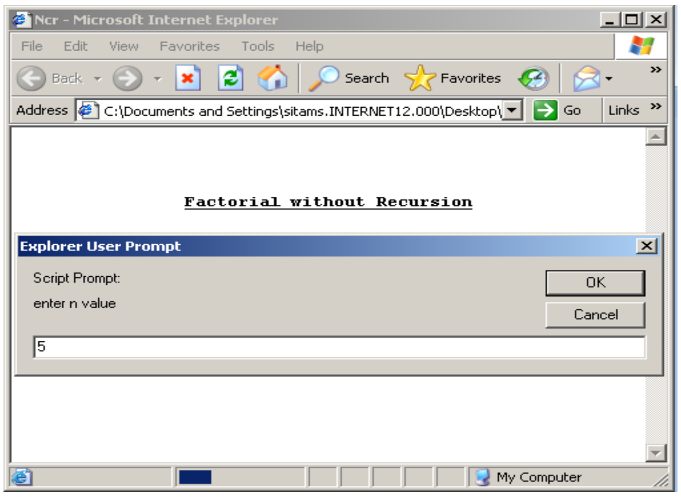
Step2: Read n in script tag of body section compute factorial of n by invoking the factorial function.

Step3: Print the factorial value.

FINDING FACTORIAL using JAVASCRIPT FUNCTIONS:

```
<html>
	<head>
		<title>Ncr</title>
		<script>
			function fact(k)
			{
				f=1;
				for(var i=1;i<=k;i++)
				f=f*i;
				return f;
			}
		</script>
	</head>
	<body>
		<pre>
		<center>
		<h3><u>Factorial without Recursion</u></h3>
		<script>
			var n = prompt("enter n value");
			var res = fact(n);
			document.writeln("Factorial of " +n+ "  is " +res);
		</script>
		</center>
	</body>
</html>
```

OUTPUT:



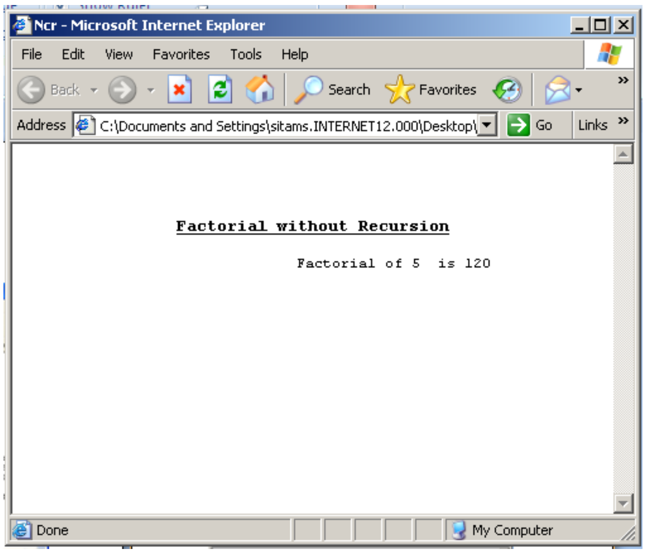
Factorial without Recursion

Explorer User Prompt

Script Prompt:
enter n value

5

Ncr - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Address C:\Documents and Settings\sitams.INTERNET12.000\Desktop\
OK
Cancel
My Computer



Factorial without Recursion

```
Factorial of 5  is 120
```

Ncr - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Address C:\Documents and Settings\sitams.INTERNET12.000\Desktop\
Done
My Computer

EXERCISE NO. 16 : FACTORIAL USING RECURSIVE FUNCTION

Aim: To compute factorial value using Recursive function in java script.

Procedure:-

Step1: Define a factorial function to compute the factorial of a value

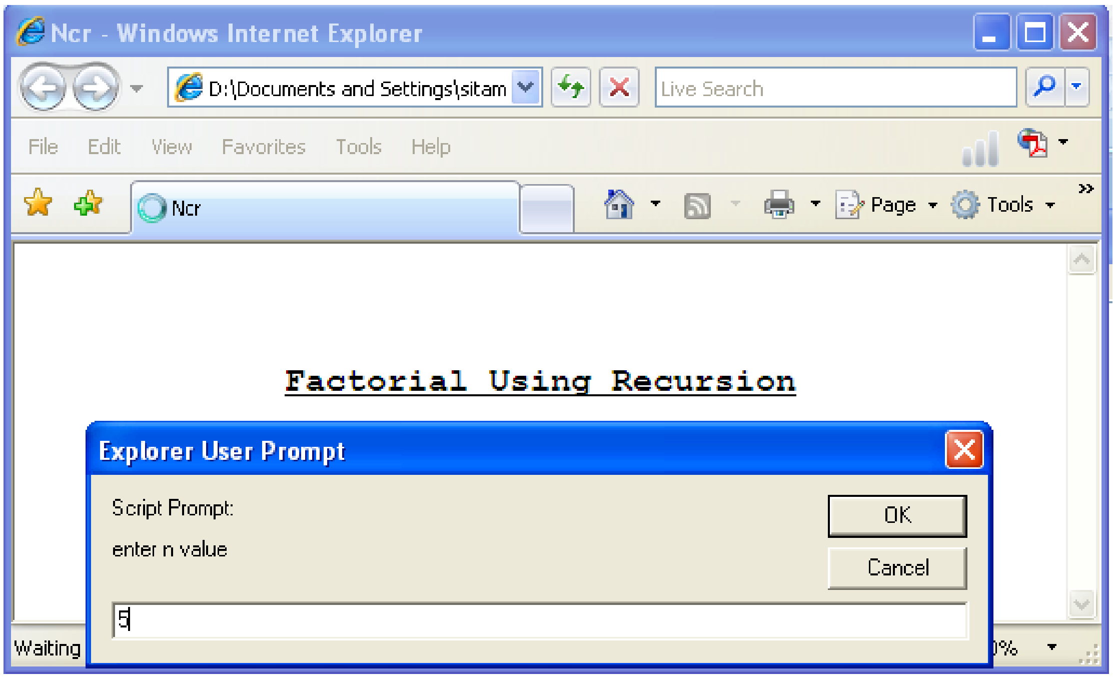
Step2: Read n by invoke the factorial function.

Step3: print the factorial value.

COMPUTING FACTORIAL using RECURSIVE FUNCTION:

```
<html>
	<head>
		<title>Ncr</title>
		<script>
			function fact(k)
			{
				if (k==1)
					return 1;
				else
					fact = fact(k-1)*k;
				return fact;
			}
		</script>
	</head>
	<body>
		<pre>
		<center>
		<h3><u>Factorial Using Recursion</u></h3>
		<script>
			var n = prompt("enter n value");
			var res = fact(n);
			document.writeln("Factorial of " +n+ "  is " +res);
		</script>
		</center>
	</body>
</html>
```

OUTPUT:


Ncr - Windows Internet Explorer
D:\Documents and Settings\sitam
Live Search
File Edit View Favorites Tools Help
Ncr
Page Tools
Waiting

Factorial Using Recursion

Explorer User Prompt

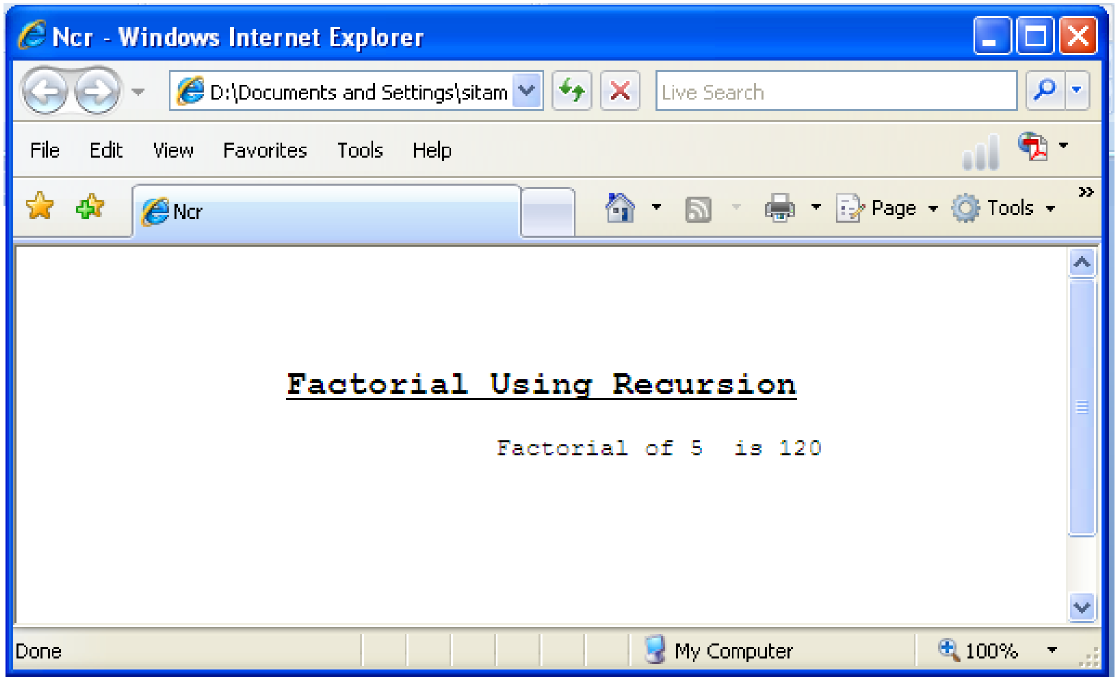
Script Prompt:

enter n value

OK

Cancel

5


Ncr - Windows Internet Explorer
D:\Documents and Settings\sitam
Live Search
File Edit View Favorites Tools Help
Ncr
Page Tools
Done
My Computer
100%

Factorial Using Recursion

```
Factorial of 5  is 120
```

EXERCISE NO. 17 : JAVA SCRIPT PROGRAM TO COMPUTER NCR

Aim: To compute Nc_r value using Java Ccript.

Procedure:-

Step1: Define a function to compute the factorial of k value.

Step2: Read n, r value in script tag of body section.

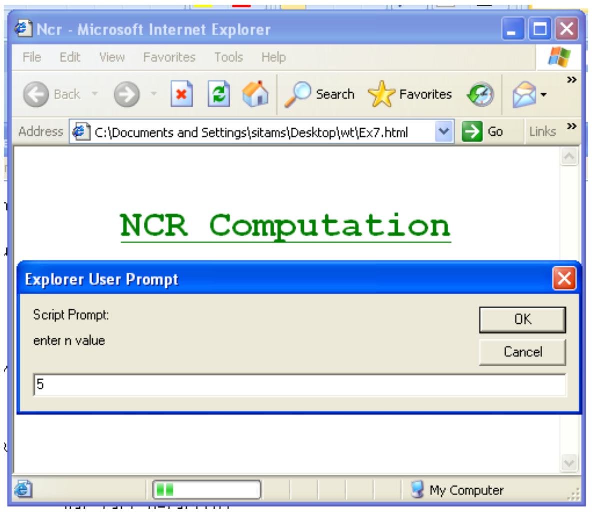
Step3: Compute Nc_r=factorial(n)/(factorial(r)*factorial(n-r)) using factorial function.

Step4: Print value of Nc_r.

COMPUTING NCr using RECURSIVE FUNCTION:

```
<html>
    <head>
        <title>Ncr</title>
        <script>
                function fact(k)
                {
                        f=1;
                        for(var i=1;i<=k;i++)
                        f=f*i;
                        return f;
                }
        </script>
    </head>
    <body>
        <pre>
        <center>
        <h1><u>NCR Computation</u></h2>
        <script>
            var n=prompt("enter n value");
            var r=prompt("enter r value");
            varfact_n=fact(n);
            varfact_r=fact(r);
            varfact_nr=fact(n-r);
            var res=fact_n/(fact_r*fact_nr);
            document.writeln(n+"c"+r+" value is:"+res);
        </script>
    </body>
</html>
```

OUTPUT:


Ncr - Microsoft Internet Explorer

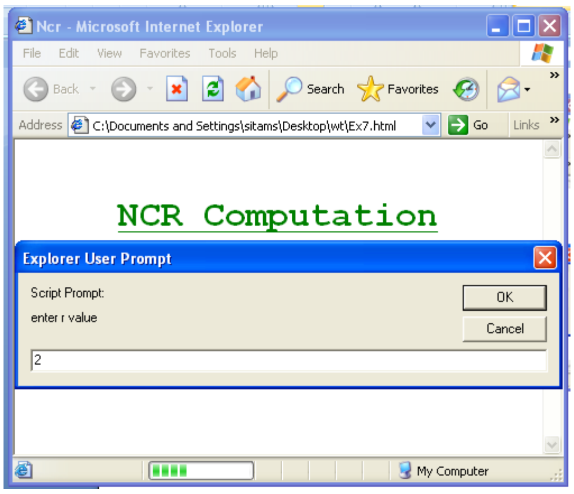
Address C:\Documents and Settings\sitams\Desktop\wt\Ex7.html

NCR Computation

Explorer User Prompt

Script Prompt:
enter n value

5


Ncr - Microsoft Internet Explorer

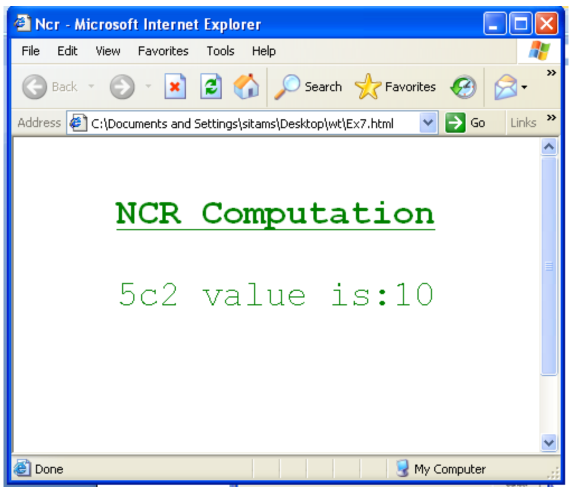
Address C:\Documents and Settings\sitams\Desktop\wt\Ex7.html

NCR Computation

Explorer User Prompt

Script Prompt:
enter r value

2


Ncr - Microsoft Internet Explorer

Address C:\Documents and Settings\sitams\Desktop\wt\Ex7.html

NCR Computation

5c2 value is:10

EXERCISE NO. 18 : USER DEFINED OBJECT IN JAVA SCRIPT (CIRCLE)

Aim: To create a customized object in java script.

Procedure:-

Step1: Declarethe object by using an object function in script tag head section.

Step2: Add properties to the newly created objects.

Step3: Add method to the newly created objects.

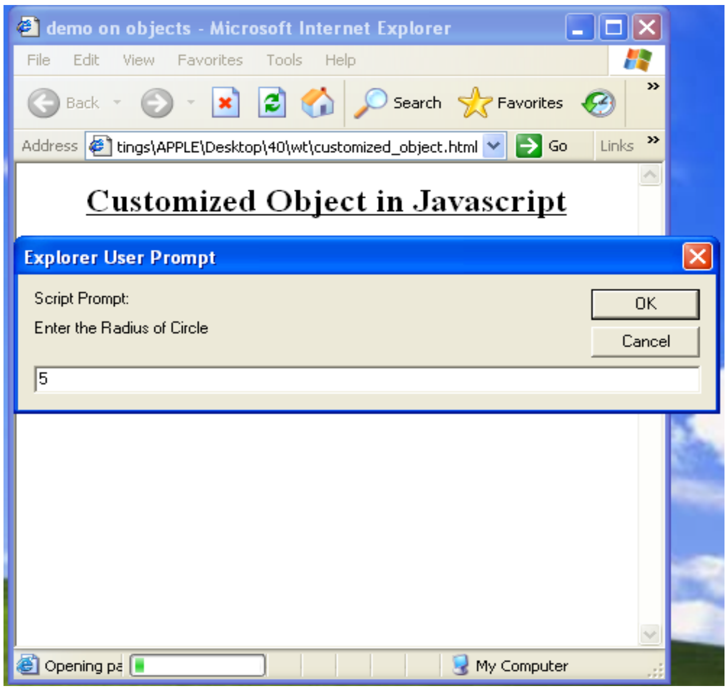
Step4: Instantiated the newly created object by using new keyword in script tag of body section.

Step5: Access and print the properties and methods of newly created objects.

USER DEFINED OBJECT IN JAVASCRIPT

```
<html>
        <head>
                <title>demo on objects</title>
        <script>
                functionCircleArea(r)
                {
                        this.radius=r;
                        this.area=computeArea;
                }
                functioncomputeArea()
                {
                        varcarea=this.radius*this.radius*3.14;
                        returncarea;
                }
        </script>
        </head>

        <body>
                <center>
                <h2><u>Customized Object in Javascript</u></h2>
                <script>
                        var r = prompt("Enter the Radius of Circle");
                        var circle=new CircleArea(r);
                        document.writeln("<b>"+"Area of circle of radius
                                is:"+circle.area());
                </script>
                </center>
        </body>
</html>
```

OUTPUT:


demo on objects - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address tings\APPLE\Desktop\40\wt\customized_object.html Go Links
Opening pa
My Computer

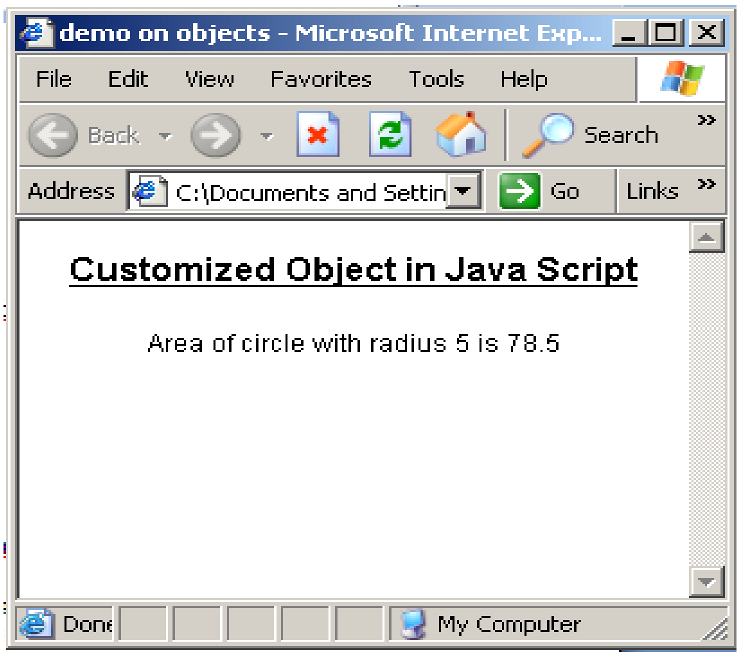
Customized Object in Javascript

Explorer User Prompt

Script Prompt:
Enter the Radius of Circle

5

OK Cancel


demo on objects - Microsoft Internet Exp...
File Edit View Favorites Tools Help
Back Search
Address C:\Documents and Settin Go Links
Done
My Computer

Customized Object in Java Script

Area of circle with radius 5 is 78.5

EXERCISE NO. 19 : USER DEFINED OBJECT IN JAVA SCRIPT (RECTANGLE)

Aim: To create a customized object in java script.

Procedure:-

Step1: Declare the object by using an object function.

Step2: Add properties to the newly created objects.

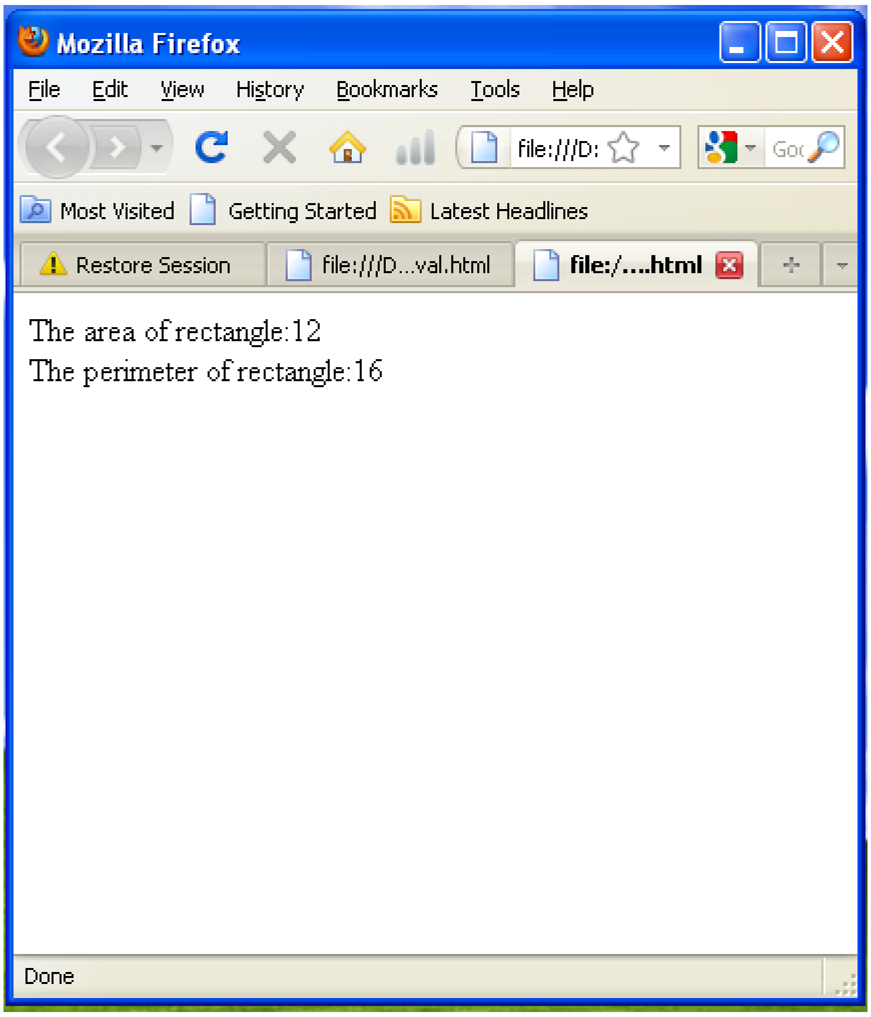
Step3: Add method to the newly created objects.

Step4: Instantiate the newly created object by using new keyword.

USER DEFINED OBJECT IN JAVASCRIPT:

```
        <html>
        <head>
                <script>
                        function rectangle(l,b)
                        {
                        this.length=l;
                        this.breadth=b;
                this.area=comp_Area;
                        this.perimeter=comp_Perim;
                        }

                        function comp_Area()
                        {
                           var a=this.length*this.breadth;
                            return a;
                        }
                        function comp_Perim()
                        {
                           var p=2*(this.length+this.breadth);
                            return p;
                        }
                </script>
        <body>
                <script>
                        var r=new rectangle(6,2);
                        document.writeln("The area of rectangle:"+r.area()+"</br>");
                        document.writeln("The perimeter of rectangle:"+r.perimeter());
                </script>
        </body>
    </html>
```

OUTPUT:


Mozilla Firefox
File Edit View History Bookmarks Tools Help
file:///D:
Most Visited Getting Started Latest Headlines
Restore Session file:///D...val.html file:/....html
Done

```
The area of rectangle:12
The perimeter of rectangle:16
```

EXERCISE NO. 20 : REGULAR EXPRESSION IN JAVA SCRIPT

Aim: To perform the following tasks using regular expression.

1. Finding pattern matching
2. Splitting pattern
3. Replacing a pattern

Procedure:

1. **Finding pattern matching:-**

```
Step1: Get the original string and hunt string.
Step2:Create regular expression for the hunt string.
Step3:Compare the hunt string with original string using regular expression method.
Step4:If hunt string is found then print the message as “string is found”.
Else
        Print the message as “string is not found”
```

2. **Splitting pattern:-**

Step1: Get the original string.
Step2: Get the splitting character.
Step3: Splite the string based on the splitting character.
Step4: Print the individual string.

3. **Replacing a pattern:-**

Step1: Get the original string, hunt string and replace string.
Step2: Replace the hunt string with the replace string using replace ().
Seep3: Print the new string.

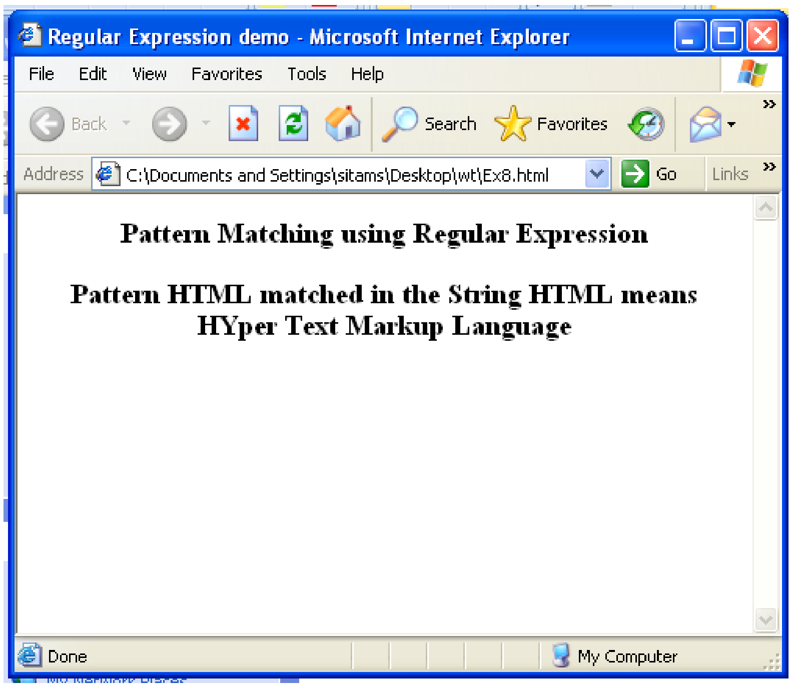
JAVASCRIPT REGULAR EXPRESSIONS:

Task 20.1:

<!—Pattern matching Demo ..>

```
<html>
        <head>
            <title>Regular Expression demo</title>
        </head>
        <body>
            <h3 align = "center"> Pattern Matching using Regular Expression <h3>
            <script>
                Var str=prompt("Enter the string");
                var pattern=prompt("Enter pattern");
                var res=str.match(pattern);
                if(res)
                  document.writeln("<b>Pattern matched:</b>"+res[0]);
                else
                  document.writeln("<b>Pattern not matching</b>");
            </script>
        </body>
</html>
```

OUTPUT


Regular Expression demo - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address C:\Documents and Settings\sitams\Desktop\wt\Ex8.html Go Links
Done
My Computer

Pattern Matching using Regular Expression

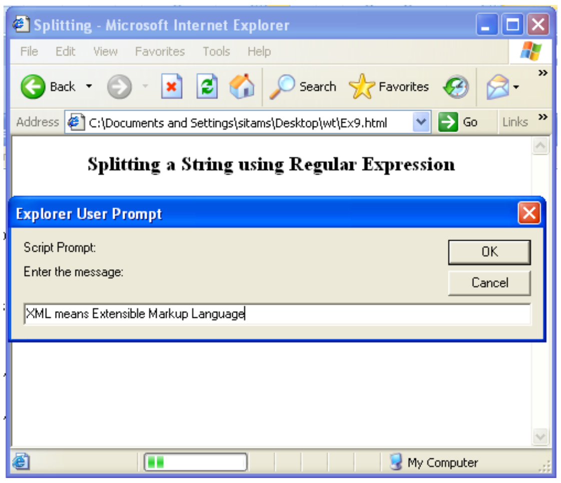
Pattern HTML matched in the String HTML means HYper Text Markup Language

Task 20.2

<!—Splitting a String Demo ..>

```
<html>
    <head>
        <title>Splitting</title>
    </head>
    <body>
        <center>
        <h3 align = "center">Splitting a String  using Regular Expression <h3>
        <pre>
        <script>
            Var msg=prompt("Enter the message:");
            var res=msg.split(" ");
            for(var i=0;i<res.length;i++)
                    document.writeln(res[i]);
        </script>
        </pre>
        </center>
    </body>
</html>
```

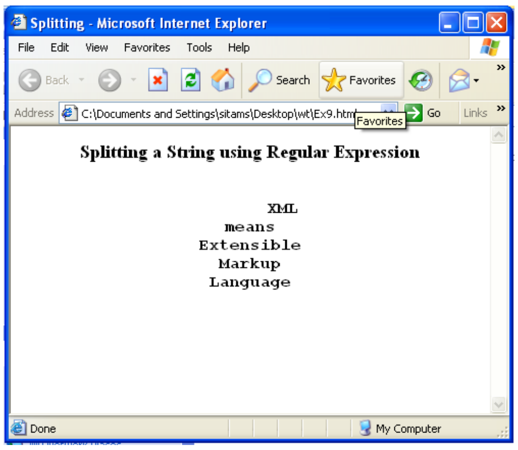
OUTPUT


Splitting a String using Regular Expression

Explorer User Prompt

Script Prompt:
Enter the message:

XML means Extensible Markup Language

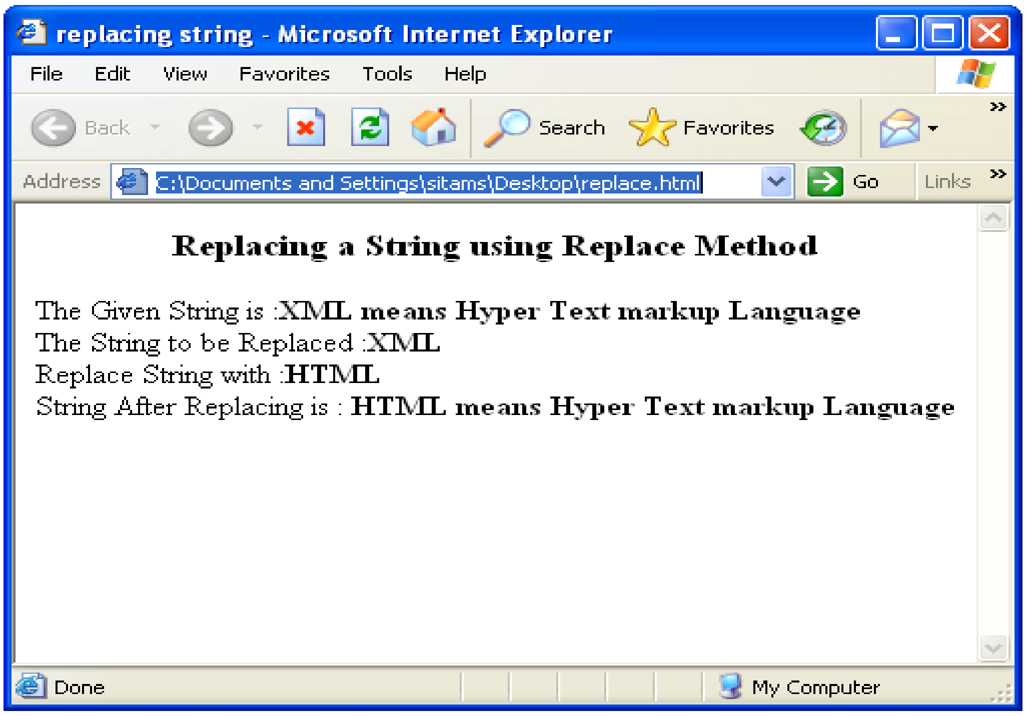

Splitting a String using Regular Expression

```
XML
means
Extensible
Markup
Language
```

Task 20.3

```
<!— Replacing  a String with Another String  Demo  ..>

<html>
        <head>
           <title>replacing string</title>
         </head>
         <body>
              <h3 align = center> Replacing a String using  Replace Method </h3>
              <script>
                   var str=prompt("Enter the string");
                   var ptrn1=prompt("Enter first pattern");
                   var ptrn2=prompt("Enter second pattern");
                   document.writeln("The Given String is :" +"<b>"+str+"</b><br/>");
                   document.writeln("The String to be Replaced :"
                            +"<b>"+ptrn1+"</b><br/>");
                   document.writeln("Replace String with             :"+"<b>"+ptrn2+"</b><br/>");
                   var res=str.replace(ptrn1,ptrn2);
                   document.writeln("String After Replacing is
                                       : "+"<b>"+res+"</b>");

                   </script>
         </body>
</html>
```

OUTPUT


replacing string - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address C:\Documents and Settings\sitams\Desktop\replace.html Go Links
Done
My Computer

```
Replacing a String using Replace Method

The Given String is :XML means Hyper Text markup Language
The String to be Replaced :XML
Replace String with :HTML
String After Replacing is : HTML means Hyper Text markup Language
```

EXERCISE NO. 21: JAVA SCRIPT BUILT IN OBJECTS

Aim: To create built in object using java script.

Procedure:

Step1: Declare a function called **BrowserDetails**in script tag.

Step2: In **BrowserDetails()**get all the details of browser using app code name, app name, app version etc and print the details.

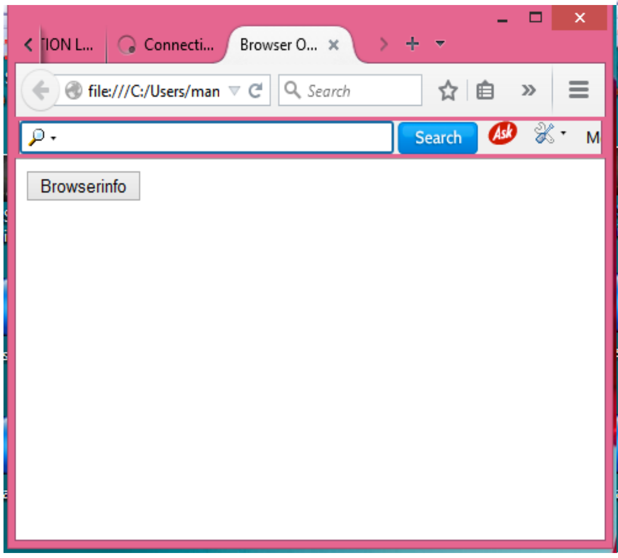
Step3: In body tag invoke the **BrowserDetails().**

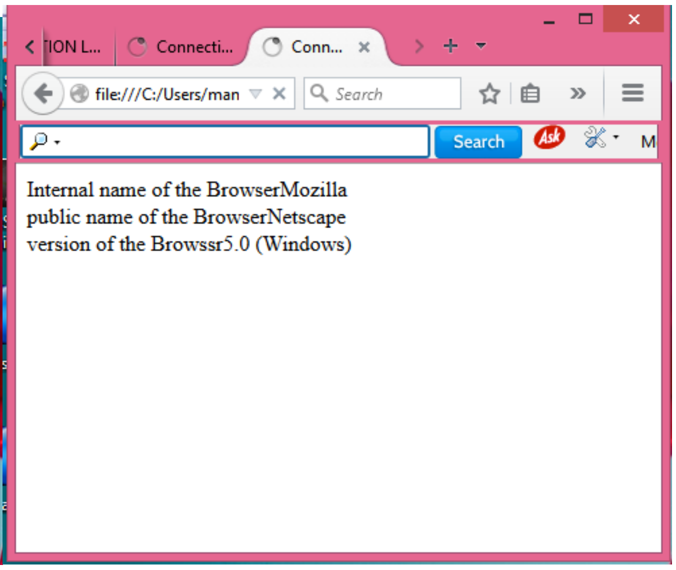
Step4: Save the file with .html extension and open the file in any browser to view the output.

JAVASCRIPT BUILT IN OBJECTS:

```
<Html>
        <head>
        <title>Browser Object Demo</title>
        <script>
                function  BrowserDetails()
                {
                        var iname=navigator.appCodeName;
                        var pname=navigator.appName;
                        var ver=navigator.appVersion;
                        document.write("Internal name of the Browser"+ iname +"<br>");
                        document.write("public name of the Browser"+ pname +"<br>");
                        document.write("version of the Browssr"+ver+"<br>");
                        }
        </script>
        </head>
        <body>
                <form action=" " method="post">
                        <input type="button" value="Browserinfo"
                        onclick="BrowserDetails()">
                </form>
        </body>
</html>
```

OUTPUT:



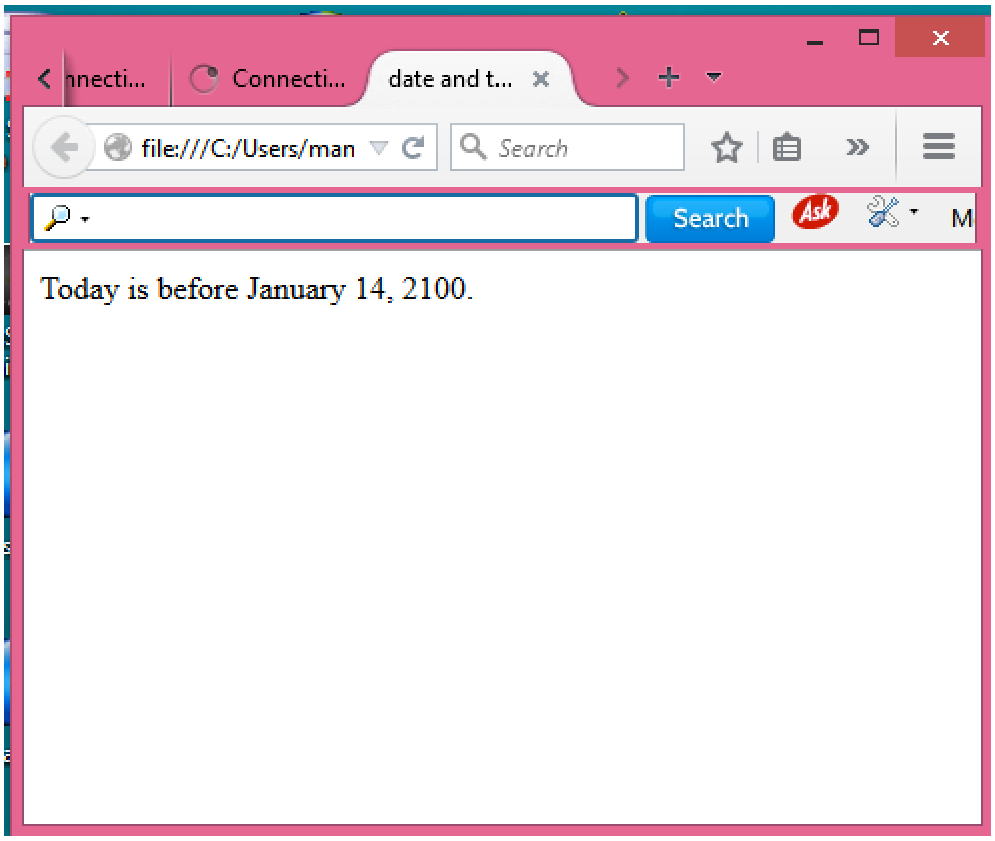


```
Internal name of the BrowserMozilla
public name of the BrowserNetscape
version of the Browssr5.0 (Windows)
```

Date Object

```
<html>
        <head>
                <title>date and time demo</title>
        </head>
        <body>
                <script>
                        var today, someday, text;
                        today = new Date();
                        someday = new Date();
                        someday.setFullYear(2100, 0, 14);
                        if (someday > today)
                           text = "Today is before January 14, 2100.";
                        else
                           text = "Today is after January 14, 2100.";
                        document.writeln(text);

                </script>
        </body>
</html>
```

OUTPUT



```
Today is before January 14, 2100.
```

.

EXERCISE NO. 22: JAVA SCRIPT EVENTS

Aim: To create a student form and illustrate the events.

Procedure:

Step1: Create a **Form** using form tag.

step2: Place **Text Boxes** and name them as**stud no, sname, sub1, sub2, sub3, total, avg, result**.

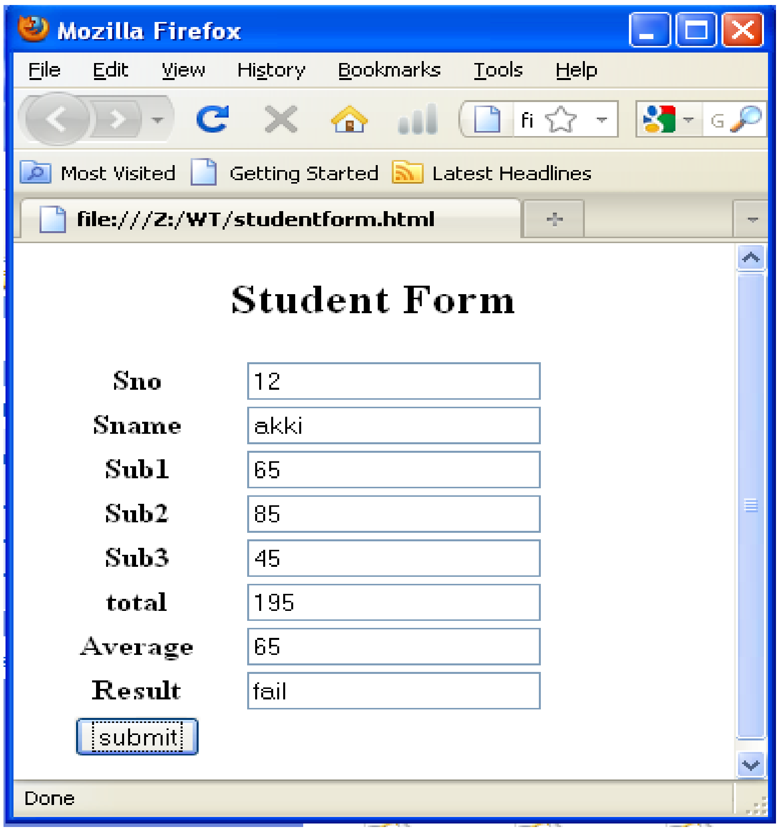
Step3: Write a function called **compute()** for **calculating total, average and result**.

Step4: Invoke the function when the **submit button is clicked**.

A PROGRAM TO ILLUSTRATE JAVASCRIPT EVENTS:

```
<html>
<head>
        <script>
                function compute()
                {
                var m1=document.forms[0].elements[2].value;
                var s1=parseInt(m1);
                var m2=document.forms[0].elements[3].value;
                var s2=parseInt(m2);
                var m3=document.forms[0].elements[4].value;
                var s3=parseInt(m3);
                var tot=s1+s2+s3;
                var avg=tot/3;
                var res;
                if((s1>=50)&&(s2>=50)&&(s3>=50))
                res="pass";
                else
                res="fail";
                document.forms[0].elements[5].value=tot;
                document.forms[0].elements[6].value=avg;
                document.forms[0].elements[7].value=res;

                }
        </script>
</head>
<body>
        <form method="post">
                <center>
                <h2>Student Form</h2>
                <table border="0" width=100% align="center">

                        <tr>
                                <th>Sno</th>
                                <td><input type="text" name="sno"></td>
                        </tr>
                        <tr>
                                <th>Sname</th>
                                <td><input type="text" name="sname"></td>
                        </tr>
                        <tr>
                                <th>Sub1</th>
                                <td><input type="text" name="s1"></td>
                        </tr>
                        <tr>
                                <th>Sub2</th>
                                <td><input type="text" name="s2"></td>
                        </tr>
                        <tr>
                                <th>Sub3</th>
                                <td><input type="text" name="s3"></td>
                        </tr>


                        <tr>
                                <th>total</th>
                                <td><input type="text" name="tot"></td>
                        </tr>
                        <tr>
                                <th>Average</th>
                                <td><input type="text" name="avg"></td>
                        </tr>
                        <tr>
                                <th>Result</th>
                                <td><input type="text" name="res"></td>
                        </tr>
                        <tr>
                                <th align="center">
                                <input type="button" value="submit" onClick="compute()">
                                </th>
                        </tr>
                </table>
                </center>
        </form>
</body>
</html>
```

OUTPUT:


Mozilla Firefox
File Edit View History Bookmarks Tools Help
Most Visited Getting Started Latest Headlines
file:///Z:/WT/studentform.html
submit
Done

Student Form

Sno	12
Sname	akki
Sub1	65
Sub2	85
Sub3	45
total	195
Average	65
Result	fail

EXERCISE NO. 23: EMPLOYEE SALARY FORM USING JAVA SCRIPT EVENTS

Aim: To create an employee salary details FORM and COMPUTE GS AND NS using events.

Procedure:

Step1: Create a **form** using **<form> tag.**

Step2: Place**TextBoxes** and name them **as eno, ename, bsal, hra , pf, da, gs, ns.**

Step4: Write functions for calculations hra, da, pf, gs and ns.

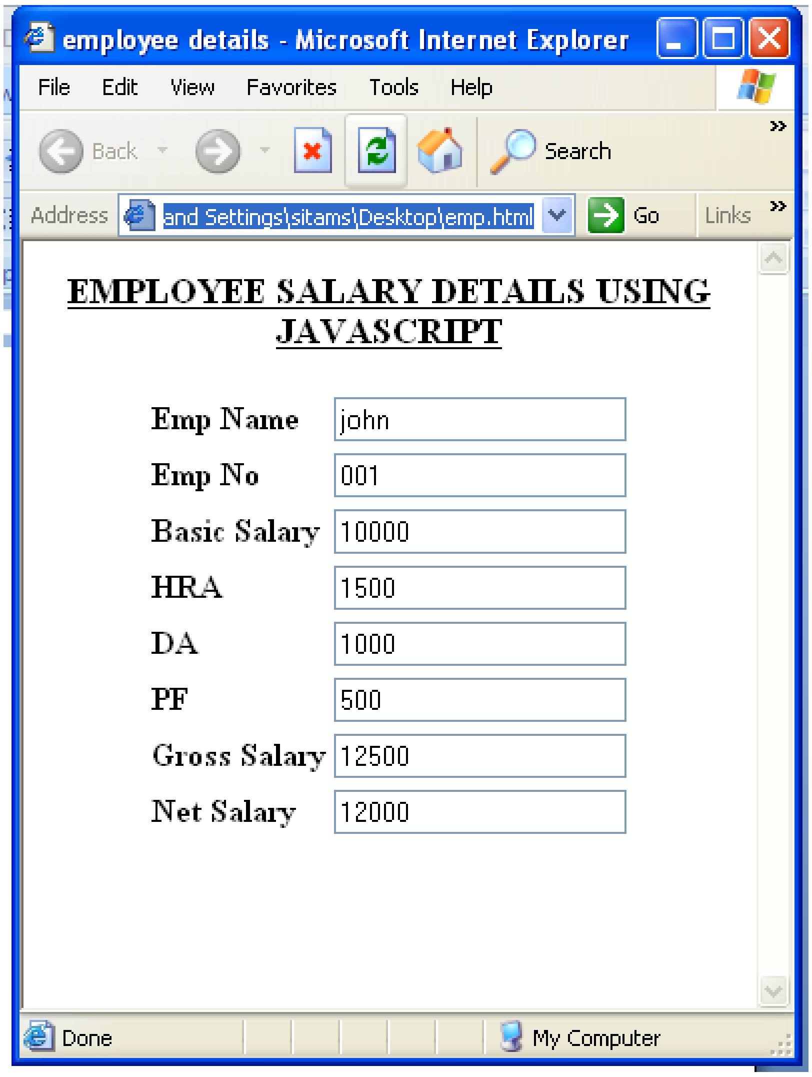
Step4: Revoke the functions using ‘on blur’ Event

EMPLOYEE SALARY FORM TO ILLUSTRATE JAVASCRIPT EVENTS:

```
<html>
        <head>
                <title>employee details</title>
                <h3 align = "center"><u> EMPLOYEE SALARY DETAILS
                                        USING JAVASCRIPT</u></h3>
                <script>
                    function hra()
                    {
                        var bs=document.forms[0].elements[2].value;
                        var bs1=parseInt(bs);
                        var hra1=0.15*bs1;
                        document.forms[0].elements[3].value=hra1;
                    }

                    function da()
                    {
                        var bs=document.forms[0].elements[2].value;
                        var bs1=parseInt(bs);
                        var da1=0.1*bs1;
                        document.forms[0].elements[4].value=da1;
                    }

                    function pf()
                    {
                        var bs=document.forms[0].elements[2].value;
                        var bs1=parseInt(bs);
                        var pf1=0.05*bs1;
                        document.forms[0].elements[5].value=pf1;
                    }

                    function gs()
                    {
                        var
                        gs1=parseInt(document.forms[0].elements[2].value)+
                        parseInt(document.forms[0].elements[3].value)+
                        parseInt(document.forms[0].elements[4].value);
                        document.forms[0].elements[6].value=gs1;
                    }

                    function ns()
                    {
                        var ns1=parseInt(document.forms[0].elements[6].value)-
                        parseInt(document.forms[0].elements[5].value);
                        document.forms[0].elements[7].value=ns1;
                    }
          </script>

        </head>
```

```
<body>
                <form action=" " method="post">
                <table border=0 align = center>
                <tr>
                        <th align = left>Emp Name
                        <td><input type="text" value="john">
                </tr>
                <tr>
                        <th align = left>Emp No
                        <th><input type="text" value="001">
                </tr>
                <tr>
                        <th align = left>Bsalary
                        <td><input type="text" value="10000">
                </tr>
                <tr>
                        <th align = left>hra
                        <td><input type="text" onBlur="hra()">
                </tr>
                <tr>    <th align = left>da
                        <td><input type="text" onBlur="da()">
                </tr>

                <tr>
                        <th align = left>pf
                        <td><input type="text" onBlur="pf()">
                </tr>

                <tr>
                        <th align = left>Gross Salary
                        <td><input type="text" onBlur="gs()">
                </tr>
                <tr>
                        <th align = left>Net  Salary
                        <td><input type="text" onBlur="ns()">
                </tr>
                </table>
                </form>

        </body>
</html>
```

OUTPUT


employee details - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search
Address and Settings\sitams\Desktop\emp.html Go Links
Done My Computer

EMPLOYEE SALARY DETAILS USING JAVASCRIPT

Emp Name	john
Emp No	001
Basic Salary	10000
HRA	1500
DA	1000
PF	500
Gross Salary	12500
Net Salary	12000

XML

EXERCISE NO . 24: WELL FORMED NESS AND VALIDNESS OF AN XML DOCUMENT

Aim: To check the xml document **well formedness and validness using DTD.**

Procedure:

Step1: Write DTD file and save it as **“first.dtd”**

Step2: Write an xml file called “**cataloguedtd.xml”** which links with “**first.dtd”.**

Step3: Open the **xml file** and **dtd file** in **xml spy editor**.

Step4: Check the well formed ness of xml document by clicking on **well formed icon** in the spy editor.

Step5: Check the validness of xml document by clicking on **validness** icon spy editor.

CHECKING WELL-FORMEDNESS AND VALIDNESS (using DTD) OF AN XML DOCUMENT:

first.dtd

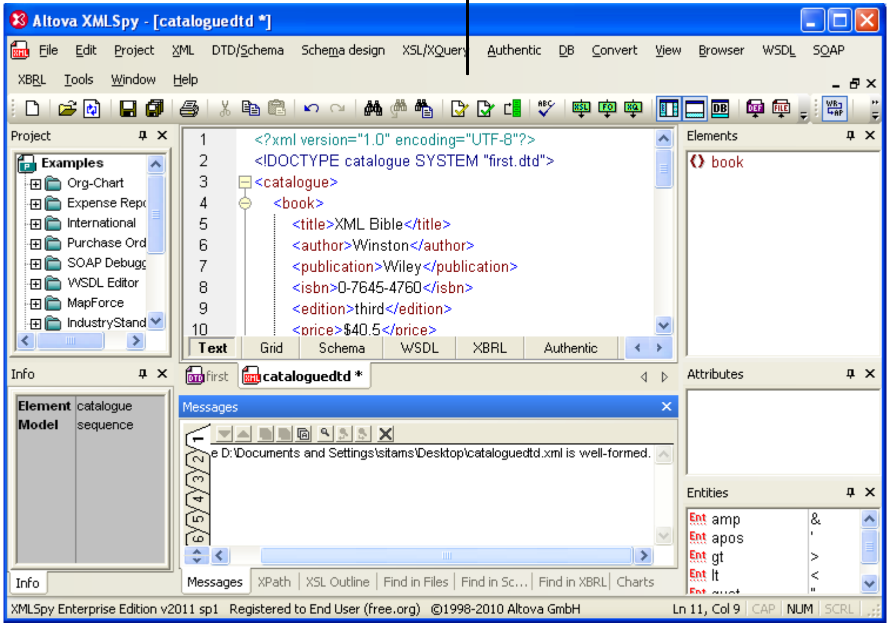
```
<?xml version="1.0" encoding="UTF-8"?>
<!ELEMENT catalogue (book+)>
<!ELEMENT book (title, author, publication, isbn, edition, price)>
	<!ELEMENT title (#PCDATA)>
	<!ELEMENT author (#PCDATA)>
	<!ELEMENT publication (#PCDATA)>
	<!ELEMENT isbn (#PCDATA)>
	<!ELEMENT edition (#PCDATA)>
	<!ELEMENT price (#PCDATA)>
```

Cataloguedtd.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE catalogue SYSTEM "Z:\AJP\xml\catdtd.dtd">
<catalogue>
	<book>
		<title>XML Bible</title>
		<author>Winston</author>
		<publication>Wiley</publication>
		<isbn>0-7645-4760</isbn>
		<edition>third</edition>
		<price>$40.5</price>
	</book>
	<book>
		<title>Artificial Intelligence</title>
		<author>S.Russel</author>
		<publication>Princeton Hall</publication>
		<isbn>0-13-1038</isbn>
		<edition>fourth</edition>
		<price>$63</price>
	</book>
	<book>
		<title>Java2</title>
		<author>Watson</author>
		<publication>BPB Publication</publication>
		<isbn>0-41-1058-7</isbn>
		<edition>third</edition>
		<price>$63</price>
	</book>
	<book>
		<title>HTML in 24 hours</title>
		<author>Sam Peter</author>
		<publication>Sam Publications</publication>
		<isbn>0-672-32841-0</isbn>
		<edition>third</edition>
		<price>$50</price>
	</book>
</catalogue>
```

OUTPUT

The above XML document is WELL-FORMED



Altova XMLSpy - [cataloguedtd *]
File Edit Project XML DTD/Schema Schema design XSL/XQuery Authentic DB Convert View Browser WSDL SOAP
XBRL Tools Window Help
Project
Examples
Org-Chart
Expense Repo
International
Purchase Ord
SOAP Debugg
WSDL Editor
MapForce
IndustryStand
Text Grid Schema WSDL XBRL Authentic
Elements
book
Attributes
Entities
amp &
apos '
gt >
lt <
first
cataloguedtd *
Info
Messages XPath XSL Outline Find in Files Find in Sc... Find in XBRL Charts

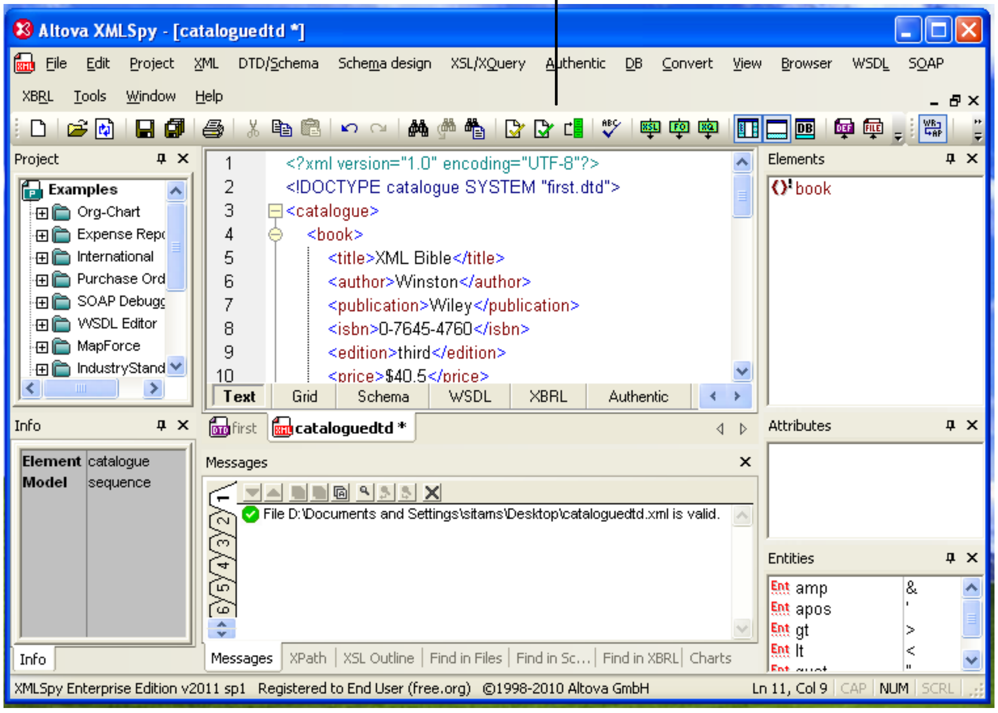
```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE catalogue SYSTEM "first.dtd">
<catalogue>
  <book>
    <title>XML Bible</title>
    <author>Winston</author>
    <publication>Wiley</publication>
    <isbn>0-7645-4760</isbn>
    <edition>third</edition>
    <price>$40.5</price>
```

Element	catalogue
Model	sequence

```
e D:\Documents and Settings\sitams\Desktop\cataloguedtd.xml is well-formed.
```

XMLSpy Enterprise Edition v2011 sp1 Registered to End User (free.org) ©1998-2010 Altova GmbH Ln 11, Col 9 CAP NUM SCRL

The above XML document is VALID



Altova XMLSpy - [cataloguedtd *]
File Edit Project XML DTD/Schema Schema design XSL/XQuery Authentic DB Convert View Browser WSDL SOAP
XBRL Tools Window Help
Project
Examples
Org-Chart
Expense Repo
International
Purchase Ord
SOAP Debugg
WSDL Editor
MapForce
IndustryStand
Text Grid Schema WSDL XBRL Authentic
Elements
book
Attributes
Entities
amp &
apos '
gt >
lt <
first
cataloguedtd *
Info
Messages XPath XSL Outline Find in Files Find in Sc... Find in XBRL Charts

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE catalogue SYSTEM "first.dtd">
<catalogue>
  <book>
    <title>XML Bible</title>
    <author>Winston</author>
    <publication>Wiley</publication>
    <isbn>0-7645-4760</isbn>
    <edition>third</edition>
    <price>$40.5</price>
```

Element	catalogue
Model	sequence

```
File D:\Documents and Settings\sitams\Desktop\cataloguedtd.xml is valid.
```

XMLSpy Enterprise Edition v2011 sp1 Registered to End User (free.org) ©1998-2010 Altova GmbH Ln 11, Col 9 CAP NUM SCRL

EXERCISE NO. 25 : DISPLAYING XML USING CSS

Aim: To write an xml file using css which displays the following information in the browser.

1. Title of the book.
2. Author Name
3. ISBN number
4. Publisher Name
5. Edition
6. Price

Procedure:

Step1: Write an xsd file for the above six elements and save it as “**first.xsd”.**

Step2: Write a css file for the above six elements and save it as **“second.css**”.

Step3: Write an xml file called “**cataloguecss.xml**” which links both “**first.xsd**” and **“second.css”.**

Step4: View the contents of xml file in any browser.

DISPLAYING THE XML DOCUMENT BASED ON THE STYLES SPECIFIED IN CASCADING STYLESHEET:

Second.css

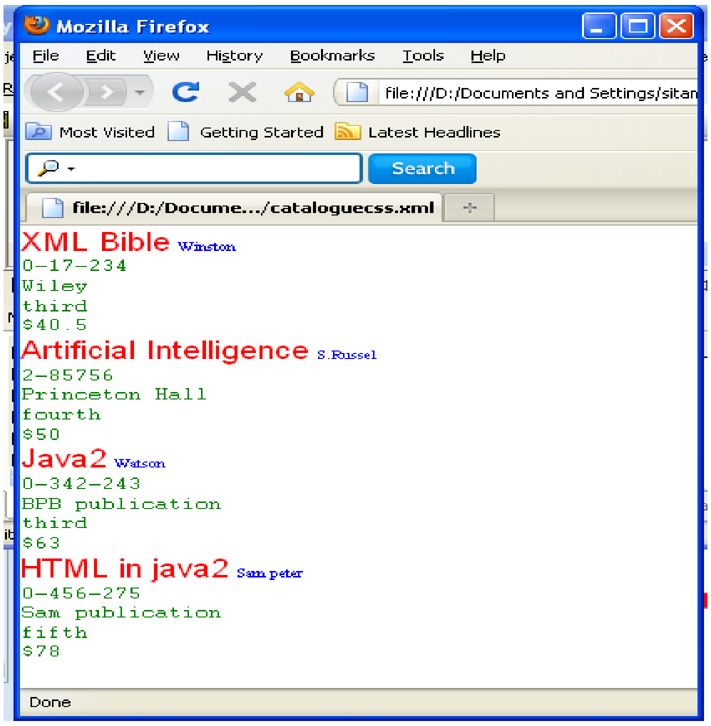
```
title
{
        font-family:arial;
        font-size:20px;
        color:red;
}
author
{
        font-family:TimesNewRoman;
        font-size:10px;
        color:blue;
}
publication,isbn,edition,price
{
        display:block;
        font-family:courier;
        font-size:7px;
        color:green;
}
```

Cataloguecss.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/css" href="catcss.css"?>
        <book>
                <title>XML Bible</title>
                <author>Winston</author>
                <isbn>0-17-234</isbn>
                <publication>Wiley</publication>
                <edition>third</edition>
                <price>$40.5</price>
        </book>
        <book>
                <title>Artificial Intelligence</title>
                <author>S.Russel</author>
                <isbn>2-85756</isbn>
                <publication>Princeton Hall</publication>
                <edition>fourth</edition>
                <price>$50</price>
        </book>
        <book>
                <title>Java2</title>
                <author>Watson</author>
                <isbn>0-342-243</isbn>
                <publication>BPB publication</publication>
                <edition>third</edition>
                <price>$63</price>
        </book>
        <book>
                <title>HTML in java2</title>
                <author>Sam peter</author>
                <isbn>0-456-275</isbn>
                <publication>Sam publication</publication>
                <edition>fifth</edition>
                <price>$78</price>
        </book>
</catalog>
```

OUTPUT

XML DOCUMENT BASED ON CSS


Mozilla Firefox
File Edit View History Bookmarks Tools Help
file:///D:/Documents and Settings/sitan
Most Visited Getting Started Latest Headlines
Search
file:///D:/Docume.../cataloguecss.xml
Done

```
XML Bible Winston
0-17-234
Wiley
third
$40.5
Artificial Intelligence S.Russel
2-85756
Princeton Hall
fourth
$50
Java2 Watson
0-342-243
BPB publication
third
$63
HTML in java2 Sam peter
0-456-275
Sam publication
fifth
$78
```

SERVLETS

EXERCISE NO. 26: LOGIN FORM USING GENERIC SERVLET

Aim: To write a servlet program for executing the login page by extending generic Servlet class.

Procedure:

Step1: Create a folder called **ServletExamples** in e:\apache-tomcat6.0.20 \webapps

Step2: Open the Notepad and write the code for login page and save it as "login.html" in **e:\apache-tomcat 6.0.20\webapps\ServletExamples.**

Step3: Create a folder called **WEB-INF** in **e:\apache-tomcat6.0.20 \webapps\ServletExamples**.

Step4: Write an xml file called **"web.xml**"in**e:\apache-tomcat6.0.20\webapps\Servlet Examples\WEB-INF**

Step5: Create a folder called **classes** in **e:\apache-tomcat6.0.20\webapps\Servlet Examples\WEB-INF**

Step6: Write a java program that extends **"GenericServlet**" and save it as **LoginProcess.java** in **e:\apache-tomcat6.0.20 \webapps\ServletExamples\WEB-INF\classes**.

Step7: Set the classpath as

Set classpath=%classpath%

E:\apache-tomcat 6.0.20\lib\servletapi.jar.

Step8: Compile the java program and check whether the java file and class file exist in **e:\apache-tomcat6.0.20 \webapps\ServletExamples\WEB-INF\classes.**

Step9: Start the tomcat server.

Step10: Execute the html file to view the result.

LOGIN FORM USING service METHOD OF GenericServlet:

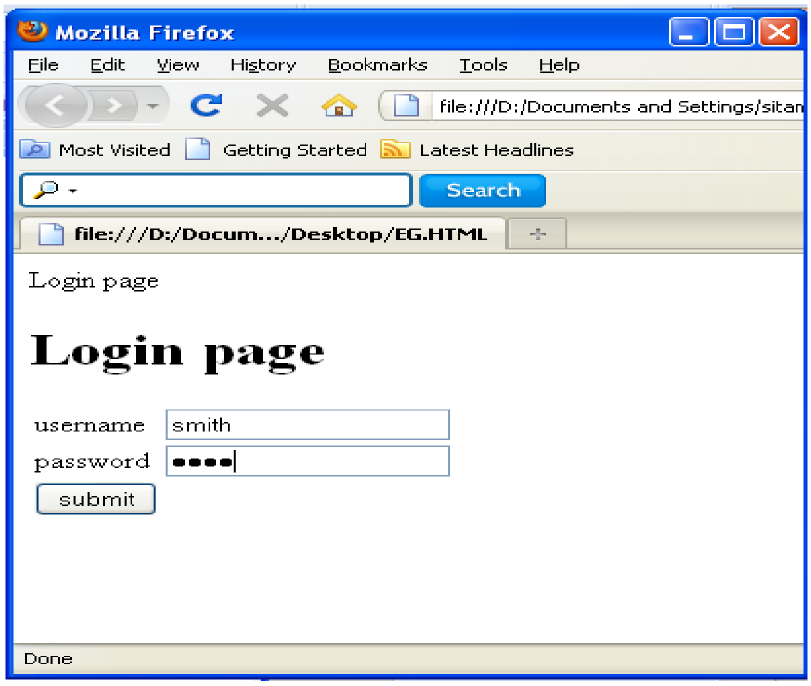
Login.html

```
<html>
        <head>Login page</head>
        <body>
                <form name="F4" method="get"
                                action="http://localhost:808/ServletExamples/Pattern1">
                <h1>Login page</h1>
                <table>
                <tr>
                        <td>username</td>
                        <td><input type="text" name="un"/></td>
                </tr>
                <tr>
                        <td>password</td>
                        <td><input type="password" name="psw"/></td>
                </tr>
                <tr>
                        <td><input type="submit" value="submit"/></td>
                </tr>
        </table>
        </form>
        </body>
</html>
```

LoginProcess.java

```
import java.io.*;
import javax.servlet.*;
public class LoginProcess extends GenericServlet
{
        public void service(ServletRequestreq,ServletResponse res)throws ServletException,IOException
        {
                String user=req.getParameter("un");
                res.setContentType("text/html");
                PrintWriter pw=res.getWriter();
                pw.println("welcome to");
                pw.println(user);
        }
}
```

OUTPUT


Mozilla Firefox
File Edit View History Bookmarks Tools Help
file:///D:/Documents and Settings/sitan
Most Visited Getting Started Latest Headlines
Search
file:///D:/Docum.../Desktop/EG.HTML
Done

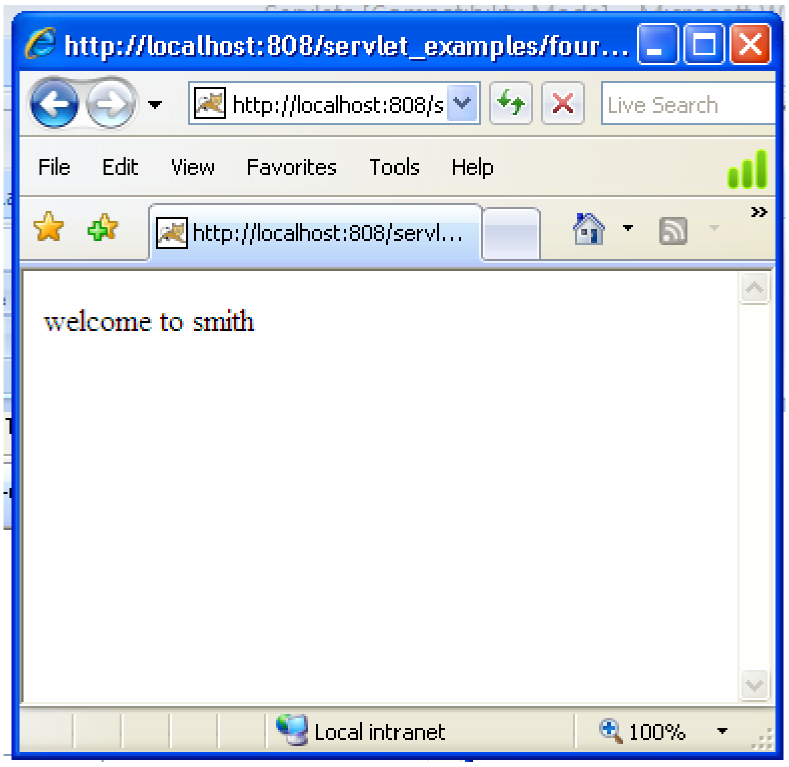
Login page

Login page

username smith

password ••••

submit


http://localhost:808/servlet_examples/four...
http://localhost:808/s
Live Search
File Edit View Favorites Tools Help
http://localhost:808/servl...
Local intranet
100%

welcome to smith

EXERCISE NO.27 : DISPLAYING COLORS USING GENERICSERVLET

Aim: To write a servlet program for displaying selected color using **GenericServlet.**

Procedure:

Step1: Create a folder called **ServletExamples** in e:\apache-tomcat6.0.20 \webapps

Step2: Open the Notepad and write the code for login page and save it as “color.html” in **E:\Apache-tomcat 6.0.20\webapps\ServletExamples.**

Step3: Create a folder called **WEB-INF** in **e:\apache-tomcat6.0.20 \webapps\ServletExamples**.

Step4: Write an xml file called **“web.xml**”in**e:\apache-tomcat6.0.20\webapps\Servlet Examples\WEB-INF**

Step5: Create a folder called **classes** in **e:\apache-tomcat6.0.20\webapps\Servlet Examples\WEB-INF**

Step6: Write a java program that extends **“GenericServlet**” and save it as **ColorProcess.java** in **e:\apache-tomcat6.0.20 \webapps\ServletExamples\WEB-INF\classes**.

Step7: Set the classpath as

Set classpath=%classpath%

E:\apache-tomcat 6.0.20\lib\servletapi.jar.

Step8: Compile the java program and check whether the java file and class file exist in **e:\apache-tomcat6.0.20 \webapps\ServletExamples\WEB-INF\classes.**

Step9: Start the tomcat server.

Step10: Execute the html file to view the result.

.

DISPLAYING COLOR USING service METHOD OF GenericServlet:

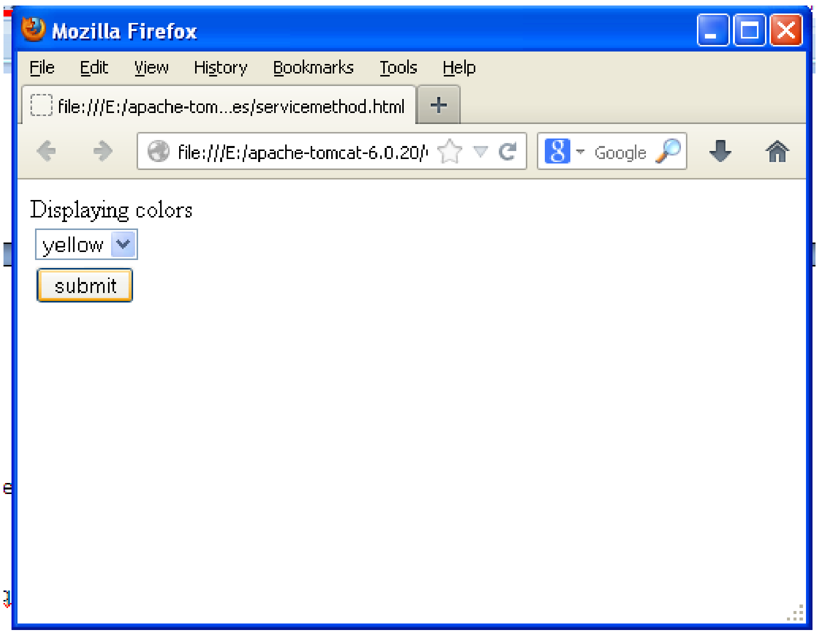
Colors.html

```
<html>
        <head>Displaying colors</head>
        <body>
                <form name="F1" method="get"
                        action="http://localhost:808/ServletExamples/Pattern2">
                <table>
                        <tr>
                                <td><select name="c1" size="1">
                                        <option>red</option>
                                        <option>yellow</option>
                                        <option>green</option>
                        </select></td>
                        </tr>
                        <tr>
                                <td><input type="submit" value="submit"/>
                        </td></tr>
                </table>
                </form>
        </body>
</html>
```

ColorsProcess.java

```
import java.io.*;
import javax.servlet.*;
public class ColorsProcess extends GenericServlet
{
        public void service(ServletRequestreq,ServletResponse res)throws
                                        ServletException,IOException
        {
                String s1=req.getParameter("c1");
                res.setContentType("text/html");
                PrintWriter pw=res.getWriter();
                pw.println("the selected color is");
                pw.println(s1);
        }
}
```

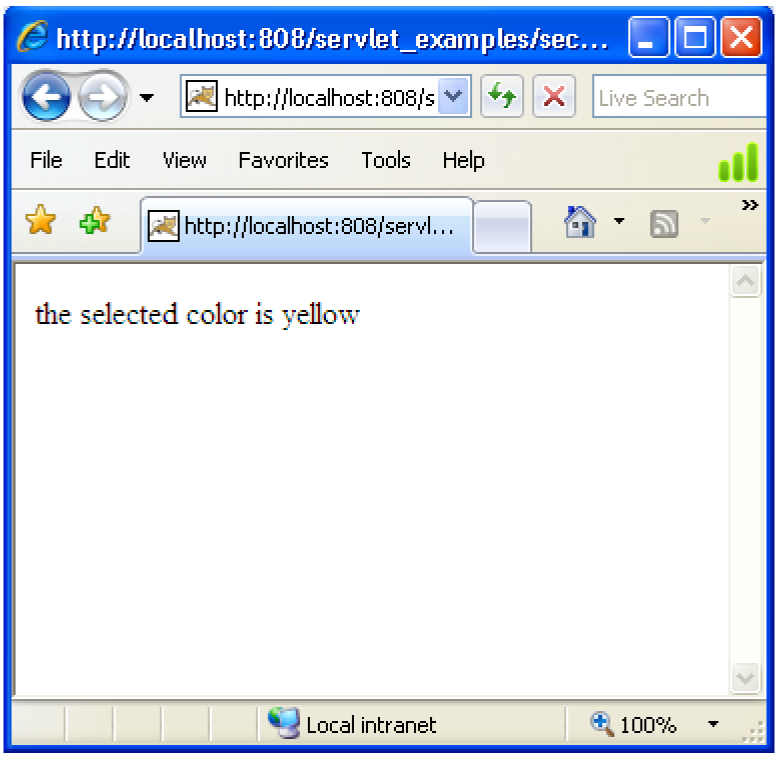
OUTPUT


Mozilla Firefox
File Edit View History Bookmarks Tools Help
file:///E:/apache-tom...es/servicemethod.html
file:///E:/apache-tomcat-6.0.20/
Google

Displaying colors

yellow

submit


http://localhost:808/servlet_examples/sec...
http://localhost:808/s
Live Search
File Edit View Favorites Tools Help
http://localhost:808/servl...
Local intranet
100%

the selected color is yellow

EXERCISE NO. 28 : DISPLAYING COLOR USING DOGET METHOD OF HTTPSERVLET

Aim: To write a servlet program for displaying the color name using doGet() method of HttpServlet class

Procedure:

Step1: Create a folder called **ServletExamples** in **E:\Apache-tomcat6.0.20 \webapps**

Step2: Open the Notepad and write the code for Color page and save it as **“color.html”** in **E:\Apache-tomcat 6.0.20\webapps\ServletExamples.**

Step3: Create a folder called **WEB-INF** in **e:\apache-tomcat6.0.20 \webapps\ServletExamples**.

Step4: Write an xml file called **“web.xml**”in**e:\apache-tomcat6.0.20\webapps\Servlet Examples\WEB-INF**

Step5: Create a folder called **classes** in **e:\apache-tomcat6.0.20\webapps\Servlet Examples\WEB-INF**

Step6: Write a java program that extends **“HttpServlet**” and save it as **ColorProcess.java** in **e:\apache-tomcat6.0.20 \webapps\ServletExamples\WEB-INF\classes**.

Step7: Set the classpath as

Set classpath=%classpath%

E:\apache-tomcat 6.0.20\lib\servletapi.jar.

Step8: Compile the java program and check whether the java file and class file exist in **e:\apache-tomcat6.0.20 \webapps\ServletExamples\WEB-INF\classes.**

Step9: Start the tomcat server.

Step10: Execute the html file to view the result.

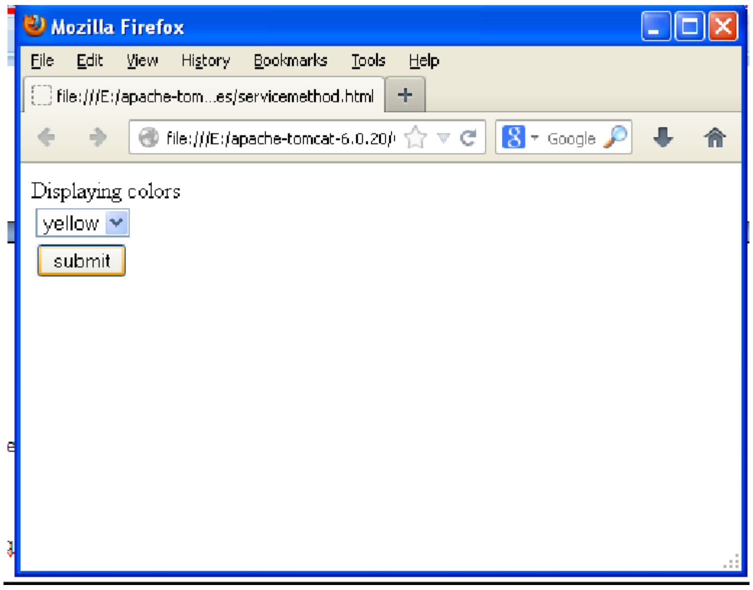
ColorsGet.html

```
<html>
        <head>Displaying colors</head>
        <body>
                <form name="F2" method="get"
                                action="http://localhost:808/ServletExamples/Pattern3">
                        <table>
                                <tr>
                                        <td><select name="c2" size="1">
                                                <option>red</option>
                                                <option>yellow</option>
                                                <option>green</option>
                                        </select></td>
                                </tr>
                                <tr>
                                        <td><input type="submit" value="submit"/></td>
                                </tr>
                        </table>
                </form>
        </body>
</html>
```

HttpGet.java

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class HttpGet extends HttpServlet
{
        public void doGet(HttpServletRequestreq,HttpServletResponse res)throws
                                                ServletException,IOException
        {
                        String s12=req.getParameter("c2");
                        res.setContentType("text/html");
                        PrintWriter pw=res.getWriter();
                        pw.println("the selected color is");
                        pw.println(s12);
        }
}
```

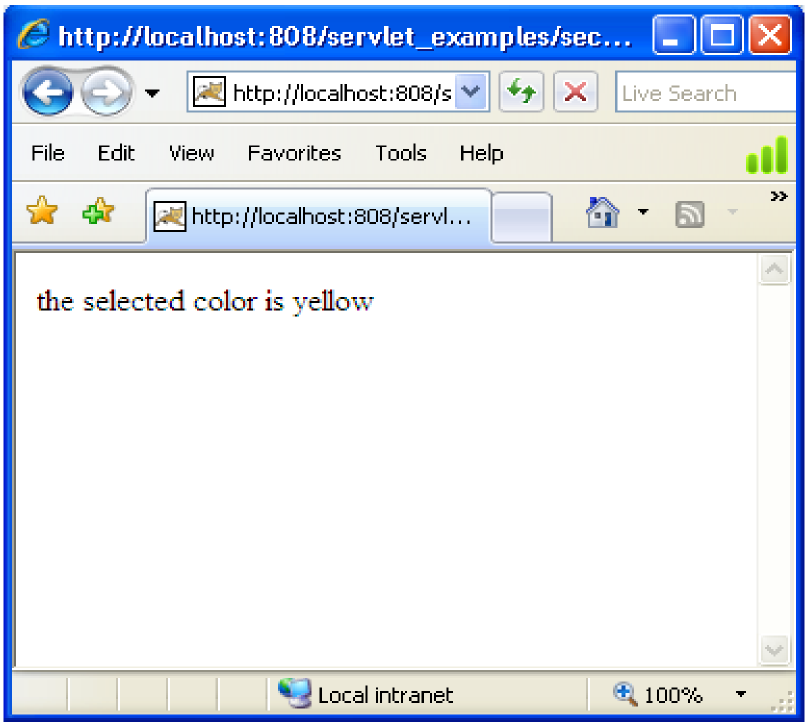
OUTPUT:


Mozilla Firefox
File Edit View History Bookmarks Tools Help
file:///E:/apache-tom...es/servicemethod.html
file:///E:/apache-tomcat-6.0.20/
Google

Displaying colors

yellow

submit


http://localhost:808/servlet_examples/sec...
http://localhost:808/s
Live Search
File Edit View Favorites Tools Help
http://localhost:808/servl...
Local intranet
100%

the selected color is yellow

EXERCISE NO. 29 : DISPLAYING COLOR USING DOPOST METHOD OF HTTPSERVLET

Aim: To write a servlet program for displaying Color Name using doPost Method of HttpServlet class.

Procedure:

Procedure:

Step1: Create a folder called **ServletExamples** in **E:\Apache-tomcat6.0.20 \webapps**

Step2: Open the Notepad and write the code for Color page and save it as **“color.html”** in **E:\Apache-tomcat 6.0.20\webapps\ServletExamples.**

Step3: Create a folder called **WEB-INF** in **e:\apache-tomcat6.0.20 \webapps\ServletExamples**.

Step4: Write an xml file called **“web.xml**”in**e:\apache-tomcat6.0.20\webapps\Servlet Examples\WEB-INF**

Step5: Create a folder called **classes** in **e:\apache-tomcat6.0.20\webapps\Servlet Examples\WEB-INF**

Step6: Write a java program that extends **“HttpServlet**” and save it as **ColorProcess.java** in **e:\apache-tomcat6.0.20 \webapps\ServletExamples\WEB-INF\classes**.

Step7: Set the classpath as

Set classpath=%classpath%

E:\apache-tomcat 6.0.20\lib\servletapi.jar.

Step8: Compile the java program and check whether the java file and class file exist in **e:\apache-tomcat6.0.20 \webapps\ServletExamples\WEB-INF\classes.**

Step9: Start the tomcat server.

Step10: Execute the html file to view the result.

DISPLAYING COLOR USING doPost METHOD OF HttpServlet:

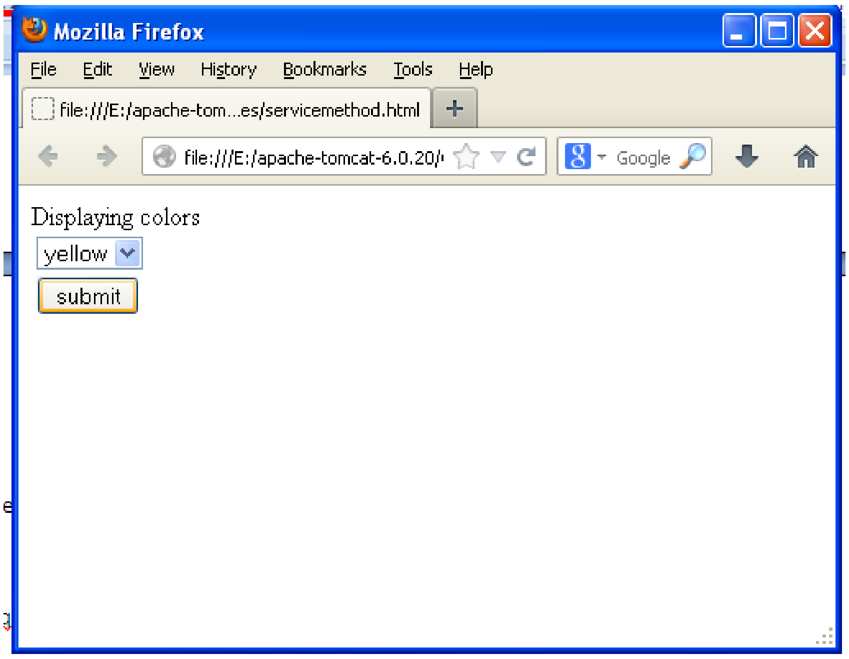
ColorsPost.html

```
<html>
        <head>Displaying colors</head>
        <body>
        <form name="F3" method="post"
                action="http://localhost:808/ServletExamples/Pattern4">
                <table>
                        <tr>
                                <td><select name="c3" size="1">
                                        <option>red</option>
                                        <option>yellow</option>
                                        <option>green</option>
                                </select></td>
                        </tr>
                        <tr>
                                <td><input type="submit" value="submit"/></td>
                        </tr>
                </table>
        </form>
        </body>
</html>
```

HttpPost.java

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class HttpPost extends HttpServlet
{
        public void doPost(HttpServletRequestreq,HttpServletResponse res)throws
                                                ServletException,IOException
        {
                String s1=req.getParameter("c1");
                res.setContentType("text/html");
                PrintWriter pw=res.getWriter();
                pw.println("The selected color is");
                pw.println(s1);
        }
}
```

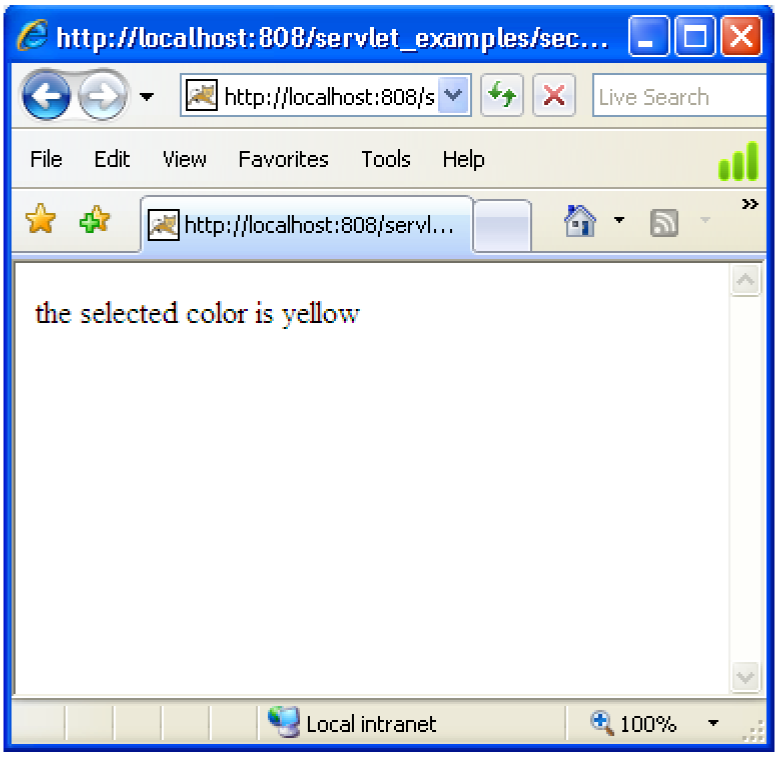
OUTPUT


Mozilla Firefox
File Edit View History Bookmarks Tools Help
file:///E:/apache-tom...es/servicemethod.html
file:///E:/apache-tomcat-6.0.20/
Google

Displaying colors

yellow

submit


http://localhost:808/servlet_examples/sec...
http://localhost:808/s
Live Search
File Edit View Favorites Tools Help
http://localhost:808/servl...
Local intranet
100%

the selected color is yellow

EXERCISE NO. 30 : READING SERVLET PARAMETER USING GENERIC SERVLET

Aim: To write a servlet program for Reading Servlet Parameters using Generic Servlet class.

Procedure:

Step1: Create a folder called **ServletExamples** in **E:\Apache-tomcat6.0.20 \webapps**

Step2: Open the Notepad and write the code for Color page and save it as **"color.html"** in **E:\Apache-tomcat 6.0.20\webapps\ServletExamples.**

Step3: Create a folder called **WEB-INF** in **e:\apache-tomcat6.0.20 \webapps\ServletExamples**.

Step4: Write an xml file called **"web.xml**"in**e:\apache-tomcat6.0.20\webapps\Servlet Examples\WEB-INF**

Step5: Create a folder called **classes** in **e:\apache-tomcat6.0.20\webapps\Servlet Examples\WEB-INF**

Step6: Write a java program that extends **"HttpServlet**" and save it as **ColorProcess.java** in **e:\apache-tomcat6.0.20 \webapps\ServletExamples\WEB-INF\classes**.

Step7: Set the classpath as

Set classpath=%classpath%

E:\apache-tomcat 6.0.20\lib\servletapi.jar.

Step8: Compile the java program and check whether the java file and class file exist in **e:\apache-tomcat6.0.20 \webapps\ServletExamples\WEB-INF\classes.**

Step9: Start the tomcat server.

Step10: Execute the html file to view the result.

READING SERVLET PARAMETERS USING service METHOD OF GenericServlet:

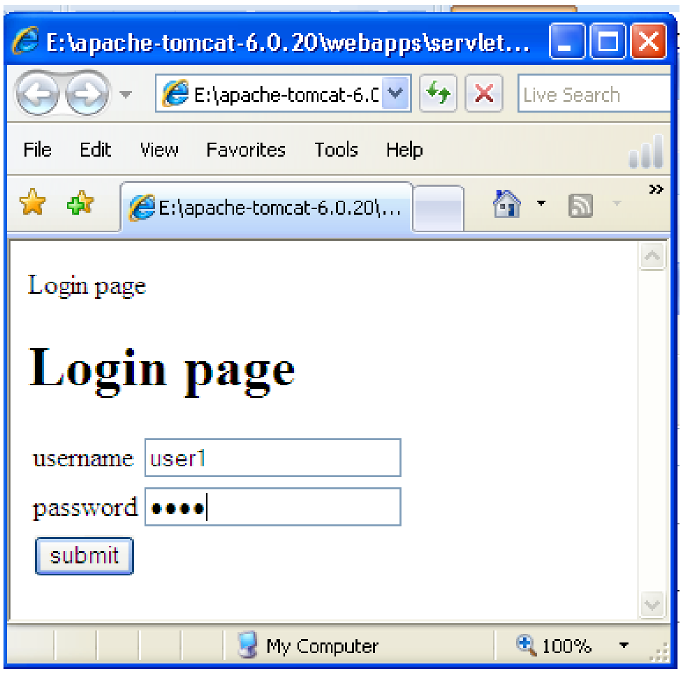
EmpLogin.html

```
<html>
        <head>Login page</head>
        <body>
        <form name="F5" method="get"
                action="http://localhost:808/ServletExamples/Pattern5">
                <h1>Login page</h1>
                <table>
                        <tr>
                                <td>username</td>
                                <td><input type="text" name="un"></td>
                        </tr>
                        <tr>
                                <td>password</td>
                                <td><input type="password" name="psw"></td>
                        </tr>
                        <tr>
                                <td><input type="submit" value="submit"></td>
                        </tr>
                </table>
        </form>
        </body>
</html>
```

EmploginReadpara.java

```
import java.io.*;
import java.util.*;
import javax.servlet.*;
public class EmploginReadpara extends GenericServlet
{
public void service(ServletRequestreq,ServletResponse res)throws
                                                ServletException,IOException
{
        res.setContentType("text/html");
        PrintWriter pw=res.getWriter();
        Enumeration e=req.getParameterNames();
        while(e.hasMoreElements())
        {
                String pname=(String)e.nextElement();
                pw.println(pname+"=");
                String pvalue=req.getParameter(pname);
                pw.println(pvalue);
        }
}
}
```

OUTPUT



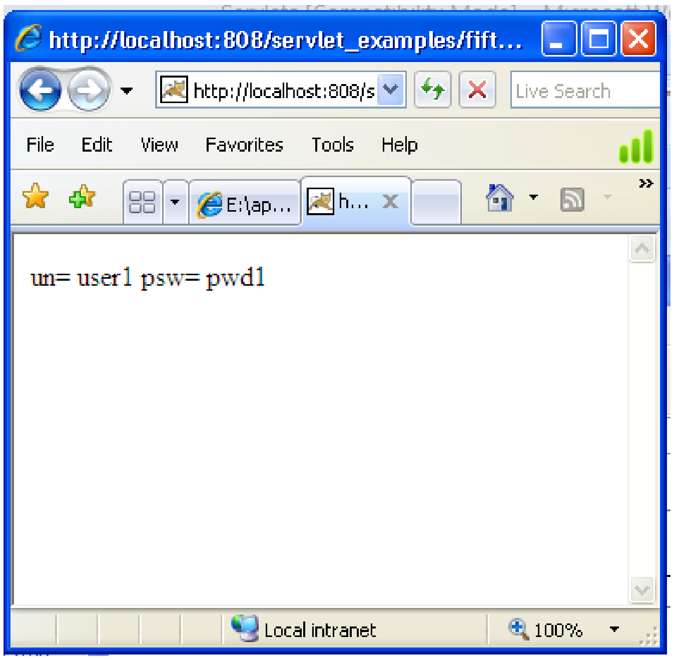
Login page

Login page

username user1

password ••••

submit



```
un= user1 psw= pwd1
```

web.xml (The Deployment Descriptor for all the above Servlet Programs)

```
<web-app>
        <servlet>
                <servlet-name>Servlet1</servlet-name>
                <servlet-class>LoginProcess</servlet-class>
        </servlet>
        <servlet-mapping>
                <servlet-name>Servlet1</servlet-name>
                <url-pattern>/Pattern1</url-pattern>
        </servlet-mapping>
        <servlet>
                <servlet-name>Servlet2</servlet-name>
                <servlet-class>ColorsProcess</servlet-class>
        </servlet>
        <servlet-mapping>
                <servlet-name>Servlet2</servlet-name>
                <url-pattern>/Pattern2</url-pattern>
        </servlet-mapping>
        <servlet>
                <servlet-name>Servlet3</servlet-name>
                <servlet-class>HttpGet</servlet-class>
        </servlet>
        <servlet-mapping>
                <servlet-name>Servlet3</servlet-name>
                <url-pattern>/Pattern3</url-pattern>
        </servlet-mapping>
        <servlet>
                <servlet-name>Servlet4</servlet-name>
                <servlet-class>HttpPost</servlet-class>
        </servlet>
        <servlet-mapping>
                <servlet-name>Servlet4</servlet-name>
                <url-pattern>/Pattern4</url-pattern>
        </servlet-mapping>
        <servlet>
                <servlet-name>Servlet5</servlet-name>
                <servlet-class>EmploginReadpara</servlet-class>
        </servlet>
        <servlet-mapping>
                <servlet-name>Servlet5</servlet-name>
                <url-pattern>/Pattern5</url-pattern>
        </servlet-mapping>
        <servlet>
                <servlet-name>Servlet6</servlet-name>
                <servlet-class>Getcookie</servlet-class>
        </servlet>
        <servlet-mapping>
                <servlet-name>Servlet6</servlet-name>
                <url-pattern>/Pattern6</url-pattern>
        </servlet-mapping>
</web-app>
```

JSP

EXERCISE NO.31 : LOGIN FORM USING JSP

Aim: To Develop a Login Form using JSP.

Procedure:

Step1: Create a folder called **JspExamples**in **E:\Apache-tomcat6.0.20 \webapps**

Step2: write the following "**LoginPage program** " and save it as"**Login.html**" in **E:\Apache-tomcat6.0.20 \webapps\JspExamples**

Step3: Write the following JSP Program and save it as "**LoginProcess.jsp"** in **E:\Apache-tomcat6.0.20 \webapps\JspExamples**

Step4: start the tomcat server.

Step5: Open the html file in any browser to view the result.

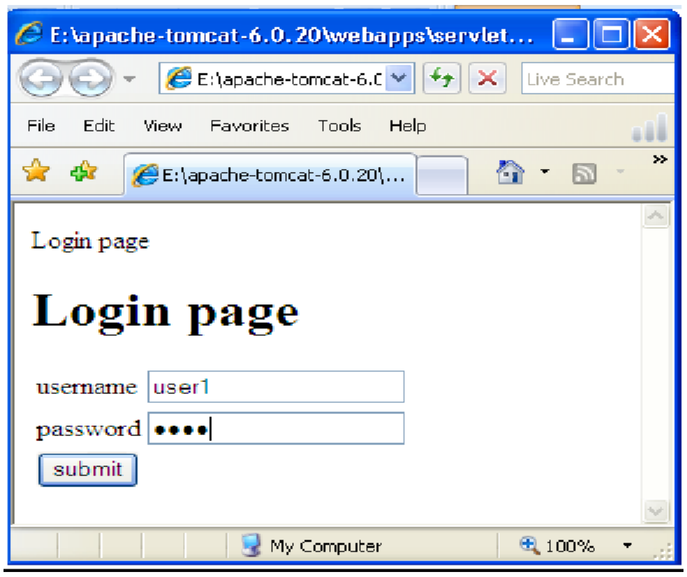
Login.html

```
        <html>
                <head>Login page</head>
                <body>
                <form name="F5" method="get"
                        action="http://localhost:808/JspExamples/LoginProcess.jsp">
                        <h1>Login page</h1>
                        <table>
                                <tr>
                                        <td>username</td>
                                        <td><input type="text" name="un"></td>
                                </tr>
                                <tr>
                                        <td>password</td>
                                        <td><input type="password" name="psw"></td>
                                </tr>
                                <tr>
                                        <td><input type="submit" value="submit"></td>
                                </tr>
                        </table>
                </form>
                </body>
        </html>
```

LoginProcess.jsp

```
<%@ page language = "java" %>
<html>
        <head></head>
        <body>
                <h3> Welcome to </h3>
                <h3>${param.un}</h3>
        </body>
</html>
```

OUTPUT:


E:\apache-tomcat-6.0.20\webapps\servlet...
E:\apache-tomcat-6.0
Live Search
File Edit View Favorites Tools Help
E:\apache-tomcat-6.0.20\...
My Computer
100%

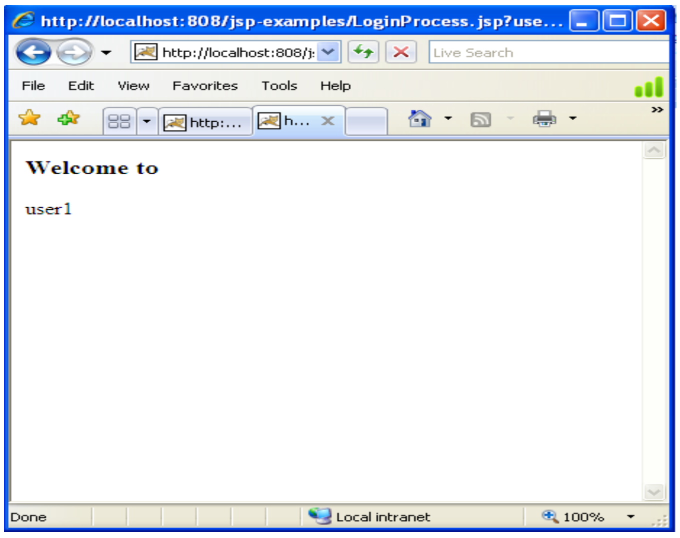
Login page

Login page

username user1

password ••••

submit


http://localhost:808/jsp-examples/LoginProcess.jsp?use...
http://localhost:808/j:
Live Search
File Edit View Favorites Tools Help
http:...
h...
Done
Local intranet
100%

Welcome to

user1

EXERCISE NO. 32 : DISPLAYING COLOR NAME USING JSP

Aim: To display selected colorname using JSP.

Procedure:

Step1: Create a folder called **JspExamples** in **E:\Apache-tomcat6.0.20 \webapps**

Step2: write the following "**ColorPage program** " and save it as"**Color.html**" in **E:\Apache-tomcat6.0.20 \webapps\JspExamples**

Step3: Write the following JSP Program and save it as "**ColorProcess.jsp"** in **E:\Apache-tomcat6.0.20 \webapps\JspExamples**

Step4: start the tomcat server.

Step5: Open the html file in any browser to view the result.

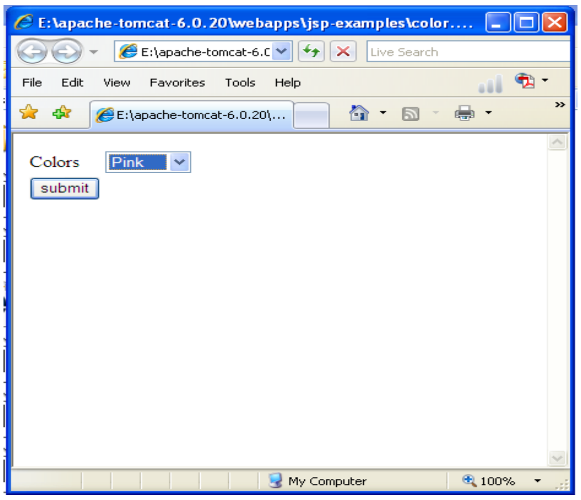
Color.html

```
<html>
        <head></head>
        <body>
        <form name="color" method="get" action="http://localhost:808/jsp-
                examples/ColorProcess.jsp">
        <table>
                <tr>
                        <td>Colors</td>
                        <td><select name="color" size="1">
                                <option>Blue</option>
                                <option>Pink</option>
                                <option>orange</option>
                        </select>
                </tr>
                <tr>
                        <td><input type="submit" value="submit"></td>
                </tr>
        </table>
        </form>
        </body>
</html>
```

ColorProcess.jsp

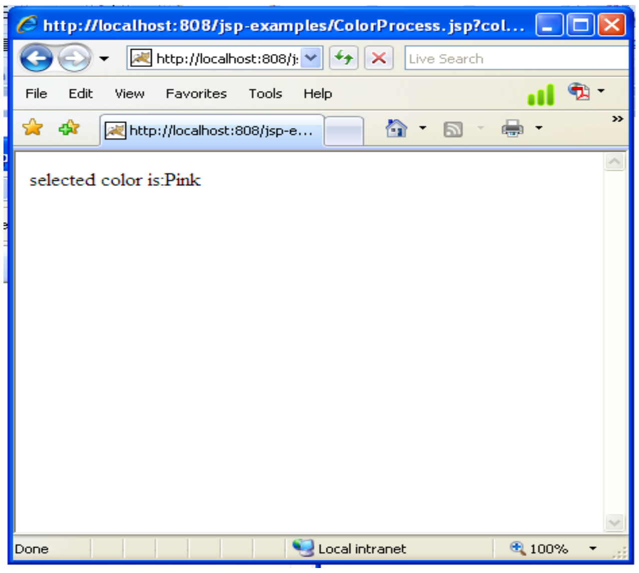
```
<html>
<head></head>
        <body>

        <th> selected color is:${param.color}</th>
        </body>
</html>
```

OUTPUT:


E:\apache-tomcat-6.0.20\webapps\jsp-examples\color....
File Edit View Favorites Tools Help
My Computer
100%

Colors Pink

submit


http://localhost:808/jsp-examples/ColorProcess.jsp?col...
File Edit View Favorites Tools Help
Done
Local intranet
100%

selected color is:Pink

EXERCISE NO .33 : DISPLAYING CART PAGE FROM CATALOGUE PAGE

Aim: To Display cart page from catalogue page.

Procedure:

Step1: Design the following catalogue page and save it as "**Catalog.html**" in **E:\Apache-tomcat 6.0.20\webapps\JspExamples**.

Step2: Write the following JSP Program and save it as **"cart.jsp"** in in **E:\Apache-tomcat 6.0.20\webapps\JspExamples**.

Step4: start the tomcat server.

Step5: Open the html file in any browser to view the result.

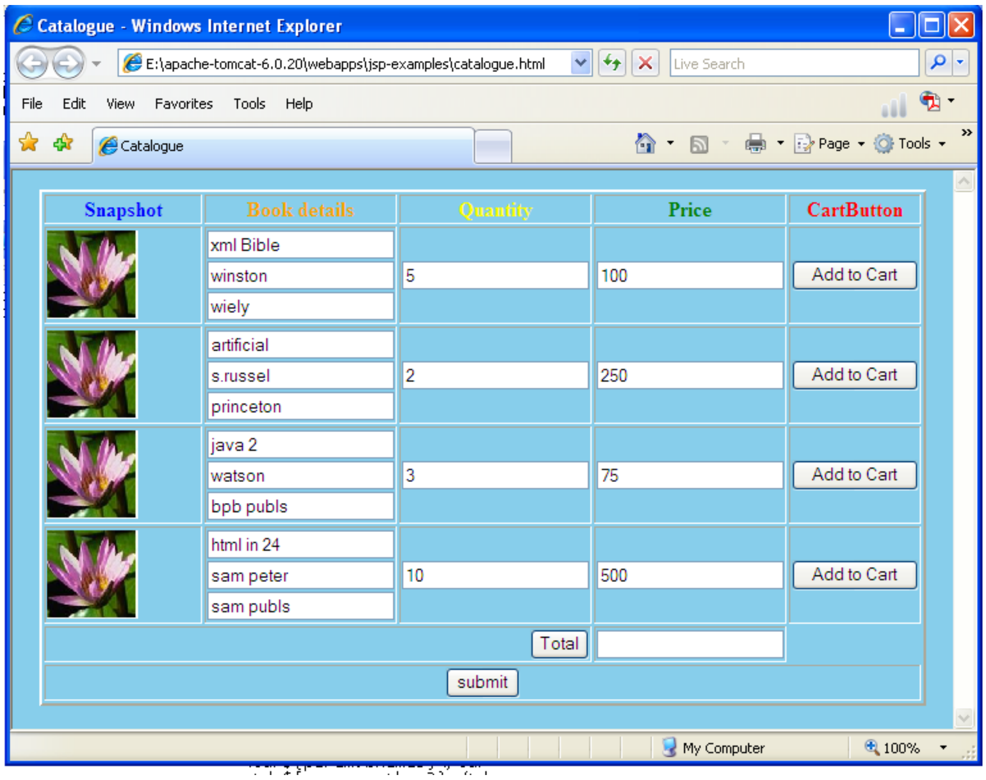
Catalog.html

```
<html>
        <head>
                <title>Catalogue</title>
        </head>
        <body bgcolor="skyblue">
        <form name="js" method="post" action="http://localhost:808/jsp-examples/cart.jsp">
                <center>
                        <table border="2">
                                <tr>
                                        <th><font color="blue">Snapshot</th>
                                        <th><font color="orange">Book details</th>
                                        <th><font color="yellow">Quantity</th>
                                        <th><font color="green">Price</th>
                                        <th><font color="red">CartButton</th>
                                </tr>
                                <tr>
                                        <td><imgsrc= "lily.jpg" width="60%"></td>
                                        <td><input type="text" name="bname1" value="xml
                                                Bible"></br>
                                                <input type="text" name="author1"
                                                        value="winston"></br>
                                                <input type="text" name="publication1"
                                                        value="wiely"></br></td>
                                        <td><input type="text" name="qty1" value="5"></td>
                                        <td><input type="text" name="price1" value="100"></td>
                                        <td><input type="button" name="cart1" value="Add to
                                                Cart"></td>
                                </tr>
                                <tr>

                                        <td><imgsrc="lily.jpg" width="60%"></td>
                                        <td><input type="text" name="bname2"
                                                        value="artificial"></br>
                                                <input type="text" name="author2"
                                                        value="s.russel"></br>
                                                <input type="text" name="publication2"
                                                        value="princeton"></br></td>
                                        <td><input type="text" name="qty2" value="2"></td>
                                        <td><input type="text" name="price2" value="250"></td>
                                        <td><input type="button" name="cart2" value="Add to
                                                Cart"></td>
                                </tr>
                                <tr>
                                        <td><imgsrc="lily.jpg" width="60%"></td>
                                        <td><input type="text" name="bname3" value="java
                                                        2"></br>
                                                <input type="text" name="author3"
                                                        value="watson"></br>
                                                <input type="text" name="publication3"
                                                        value="bpbpubls"></br></td>
                                        <td><input type="text" name="qty3" value="3"></td>
                                        <td><input type="text" name="price3" value="75"></td>
                                        <td><input type="button" name="cart3" value="Add to
                                                        Cart"></td>
                                </tr>
                                <tr>
                                        <td><imgsrc="lily.jpg" width="60%"></td>
                                        <td><input type="text" name="bname4" value="html in
                                                24"></br>
                                                <input type="text" name="author4" value="sam
                                                        peter"></br>
                                                <input type="text" name="publication4"
                                                        value="sampubls"></br></td>
                                        <td><input type="text" name="qty4" value="10"></td>
                                        <td><input type="text" name="price4" value="500"></td>
                                        <td><input type="button" name="cart4" value="Add to
                                                        Cart"></td>
                                </tr>
                                <tr>
                                        <td colspan="3" align="right" ><input type="submit"
                                                name="tot1" value="Total"/></td>
                                        <td><input type="text" name="total"/></td>
                                </tr>
                                <tr>
                                        <td colspan = "5" align = "center"><input type = "submit"
                                                value = "submit"></td>
                                </tr>
                        </table>
                </center>
        </form>
        </body>
</html>
```

Cart.jsp

```
<%@ page language="java"%>
<html>
        <head></head>
        <body>
        <h3 align = "center"> List of Books Purchased </h3>
        <table border = "2" align = "center">
                <tr>
                        <th>Bookname</th>
                        <th>Authorname</th>
                        <th>quantity</th>
                        <th>price</th>
                        <th>Amount</th>
                </tr>
                <tr>
                        <td>${param.bname1}</td>
                        <td>${param.author1}</td>
                        <td>${param.qty1}</td>
                        <td>${param.price1}</td>
                        <td>${param.qty1*param.price1}</td>
                </tr>
                <tr>
                        <td>${param.bname2}</td>
                        <td>${param.author2}</td>
                        <td>${param.qty2}</td>
                        <td>${param.price2}</td>
                        <td>${param.qty2*param.price2}</td>
                </tr>
                <tr>
                        <td>${param.bname3}</td>
                        <td>${param.author3}</td>
                        <td>${param.qty3}</td>
                        <td>${param.price3}</td>
                        <td>${param.qty3*param.price3}</td>
                </tr>
                <tr>
                        <td>${param.bname4}</td>
                        <td>${param.author4}</td>
                        <td>${param.qty4}</td>
                        <td>${param.price4}</td>
                        <td>${param.qty4*param.price4}</td>
                </tr>
                <tr>
                        <tdcolspan = 3>Total:</td>
                        <td>${param.qty1*param.price1+param.qty2*param.price2+param.qty3*
                                param.price3+param.qty4*param.price4}</td>
                </tr>
        </table>
        </body>
</html>
```

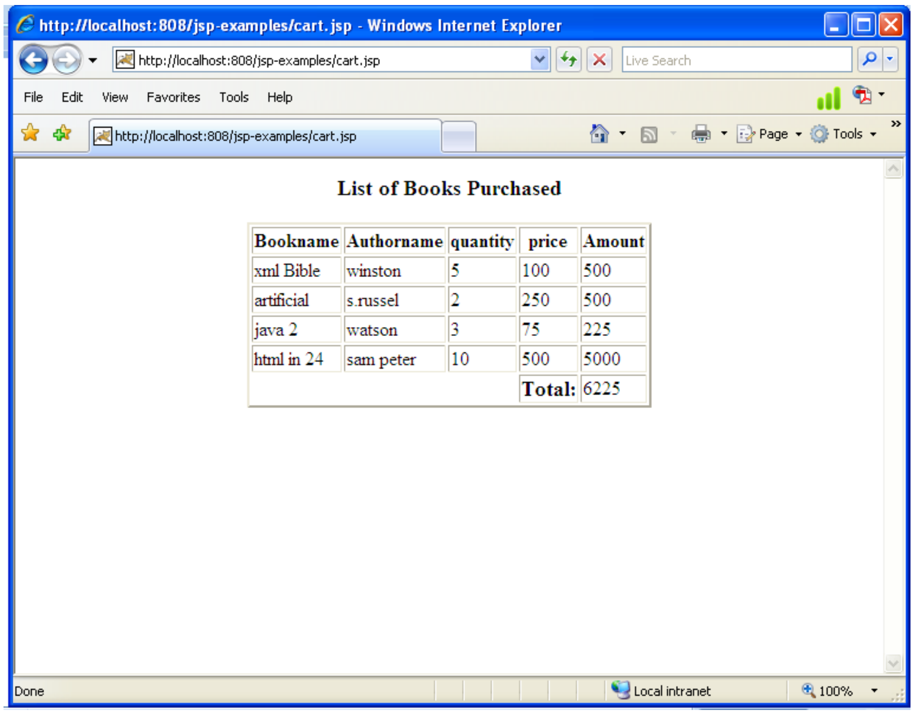
OUTPUT


Catalogue - Windows Internet Explorer

E:\apache-tomcat-6.0.20\webapps\jsp-examples\catalogue.html

Snapshot	Book details	Quantity	Price	CartButton
	xml Bible winston wiely	5	100	Add to Cart
	artificial s.russel princeton	2	250	Add to Cart
	java 2 watson bpb publs	3	75	Add to Cart
	html in 24 sam peter sam publs	10	500	Add to Cart
		Total		

submit


http://localhost:808/jsp-examples/cart.jsp - Windows Internet Explorer

List of Books Purchased

Bookname	Authorname	quantity	price	Amount
xml Bible	winston	5	100	500
artificial	s.russel	2	250	500
java 2	watson	3	75	225
html in 24	sam peter	10	500	5000
			Total:	6225

Done

EXERCISE NO. 34 : PASSING CONTROL FROM ONE PAGE TO ANOTHER PAGE

Aim: To Passing control from one page to another page.

Procedure:

Step1: Type the following JSP CODE in notepad and save it as **"InputForm.jsp", "Myjsp.jsp"** and "**ErrorPage.jsp"** in **E:\Apache-tomcat6.0.20 \webapps\JspExamples.**

Step2: start the tomcat server.

Step3: Type the urlhttp://localhost:808/jspexamples/scope.jsp in any browser to view the contents.

.

Step2: start the tomcat server.

Step3: Goto Browser and type the URL as http://localhost :808/JspExamples/InputForm.jsp

InputForm.jsp

```
<html>
        <head>
                <title>Data passing b/w pages</title>
        </head>
        <body>
        <%
                if(request.getParameter("username")=="")
                {
        %>
                <jsp:forward page="ErrorPage.jsp"/>
        <%
                }
                else if(request.getParameter("username")!=null)
                {
        %>
                <jsp:forward page="Myjsp.jsp"/>
        <%
                }
                else
                {
        %>
                <center>
                        <form method="get" action="InputForm.jsp">
                        <strong>Enter user Name:</strong>
                        <input type="text" name="username"/>
                        <br/>
                        <strong>Enter password:</strong>
                        <input type="password" name="password"></br>
                        <input type="submit" value="submit"/>
                </center>
                </form>
        <%
                }
        %>
        </body>
</html>
```

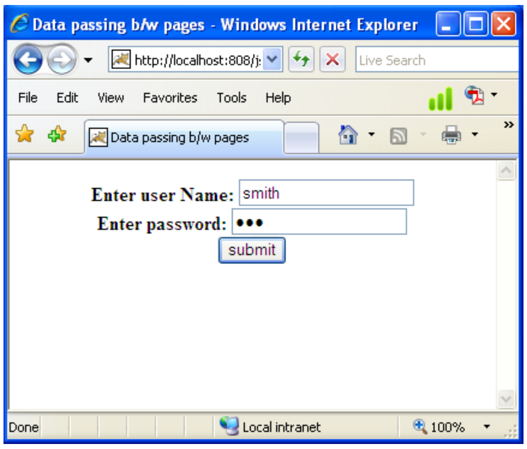
Myjsp.jsp

```
<html>
        <head></head>
        <body>
        Welcome Mr <b>${param.username}</b>
        </body>
</html>
```

ErrorPage.jsp

```
<html>
        <head>
        </head>
        <body>
        You have entered a wrong password
        <a href="InputForm.jsp">click here to go back</a>
        </body>
</html>
```

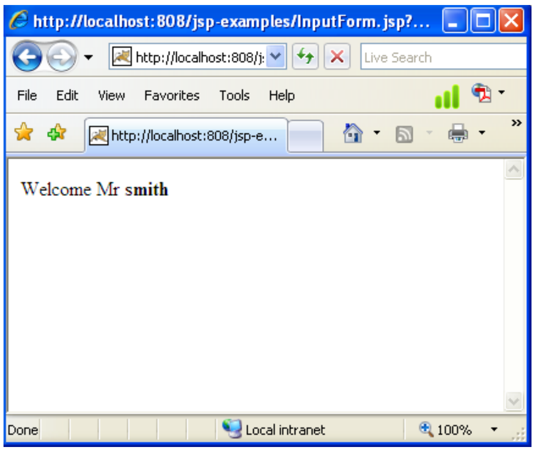
OUTPUT


Data passing b/w pages - Windows Internet Explorer
http://localhost:808/j
Live Search
File Edit View Favorites Tools Help
Data passing b/w pages
Done
Local intranet
100%

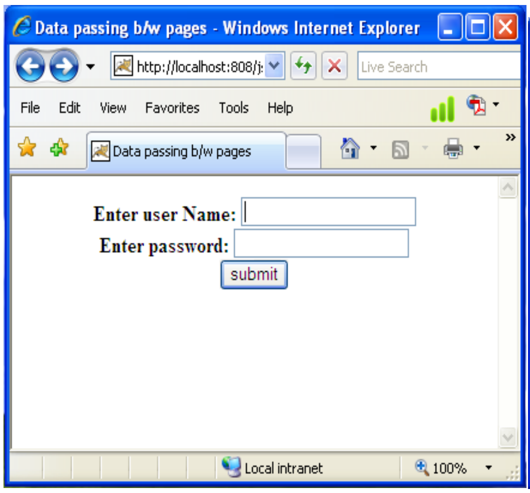
Enter user Name: smith

Enter password: •••

submit


http://localhost:808/jsp-examples/InputForm.jsp?...
http://localhost:808/j
Live Search
File Edit View Favorites Tools Help
http://localhost:808/jsp-e...
Done
Local intranet
100%

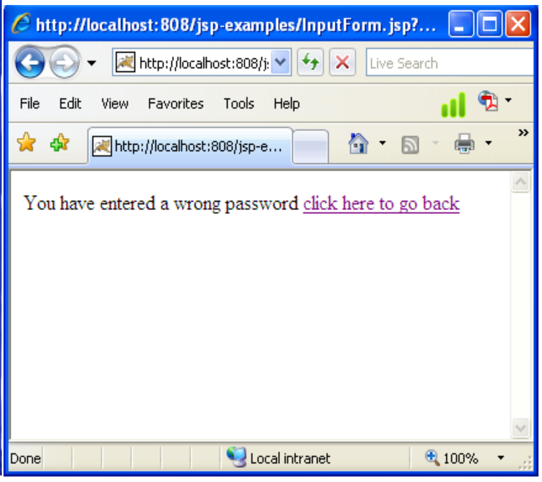
Welcome Mr **smith**


Data passing b/w pages - Windows Internet Explorer
http://localhost:808/j
Live Search
File Edit View Favorites Tools Help
Data passing b/w pages
Local intranet
100%

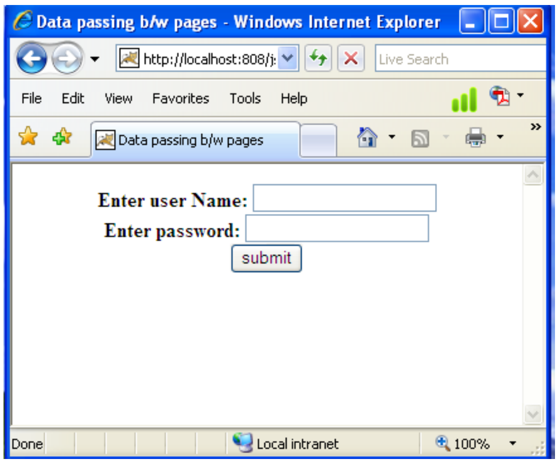
Enter user Name:

Enter password:

submit


http://localhost:808/jsp-examples/InputForm.jsp?...
http://localhost:808/j
Live Search
File Edit View Favorites Tools Help
http://localhost:808/jsp-e...
Done
Local intranet
100%

You have entered a wrong password click here to go back


Data passing b/w pages - Windows Internet Explorer
http://localhost:808/j
Live Search
File Edit View Favorites Tools Help
Data passing b/w pages
Done
Local intranet
100%

Enter user Name:

Enter password:

submit

EXERCISE NO. 35 : SESSION AND APPLICATION SCOPE ILLUSTRATION

Aim: To illustration the session and application scope variables.

Procedure:

Step1: Type the following JSP CODE in notepad and save it as **'scope.jsp'** and place in **E:\Apache-tomcat6.0.20 \webapps\JspExamples.**

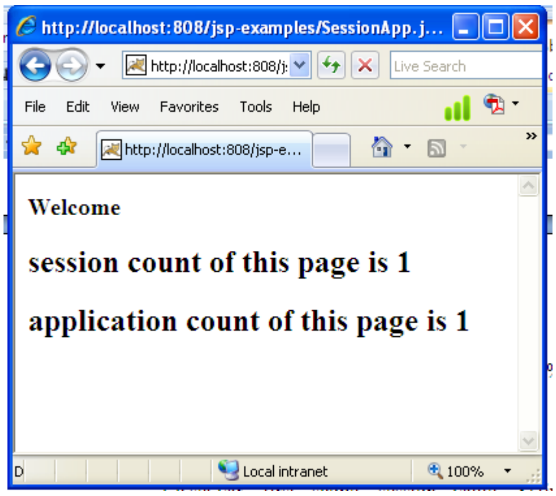
Step2: start the tomcat server.

Step3: Type the urlhttp://localhost:808/jspexamples/scope.jsp in any browser to view the contents.

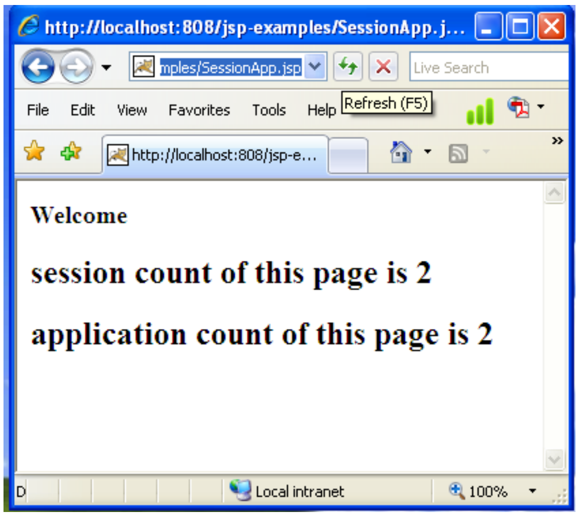
SessionApplication.jsp

```
<%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core"%>
<html>
        <head>
        </head>
        <body>
                <c:set var="first" scope="session" value="${first+1}"/>
                <c:set var="second" scope="application" value="${second+1}"/>
                <h3>Welcome </h3>
                <h2>session count of this page is ${first}</h2>
                <h2>application count of this page is ${second}</h2>
        </body>
</html>
```

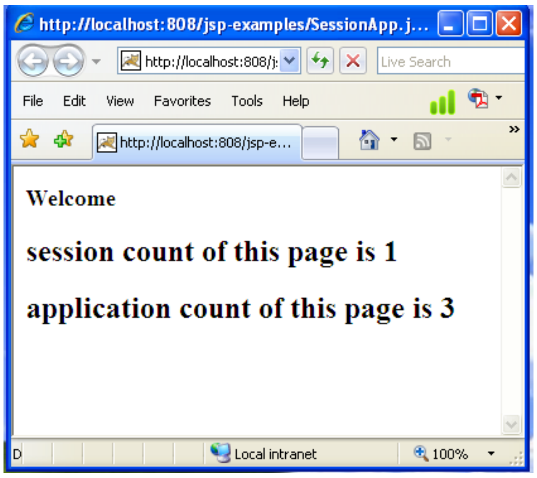
OUTPUT



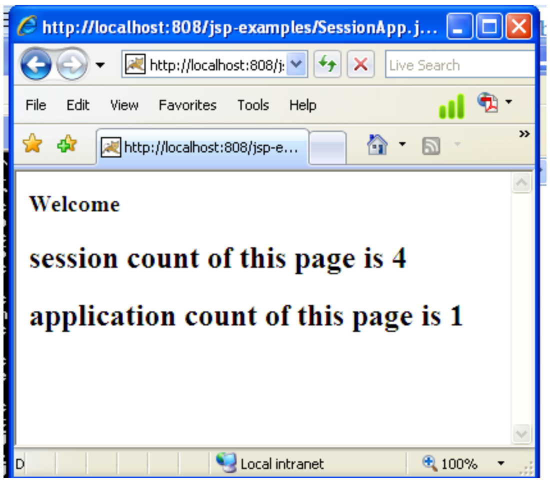
```
Welcome
session count of this page is 1
application count of this page is 1
```



```
Welcome
session count of this page is 2
application count of this page is 2
```



```
Welcome
session count of this page is 1
application count of this page is 3
```



```
Welcome
session count of this page is 4
application count of this page is 1
```

EXERCISE NO.36 : ILLUSTRATION OF JSTL CORE TAG

Aim: To illustration of jstl core tag.

Procedure:

Step1: Create a folder called **JspExamples**in **E:\Apache-tomcat 6.0.20\webapps.**

Step2: Create a foldercalled **WEB-INF** in **E:\Apache-tomcat 6.0.20\webapps\JspExamples**.

Step3: Create a folder **“lib”** in **E:\Apache-tomcat 6.0.20\webapps\JspExamples\WEB-INF**

Step4: Copy **jstl.jar and standard.jar** from**E:\Apache-tomcat 6.0.20\webapps\JspExamples\lib**.

Step5:paste the two jar files in**E:\Apache-tomcat 6.0.20\webapps\JspExamples \WEB-INF\lib**.

Step6: Set the classpath as

e:\apache-tomcat6.0.20 \web apps\jsp examples\web-inf\lib\standard.jar;

Step7: Write a jsp program that uses jst1 core tags

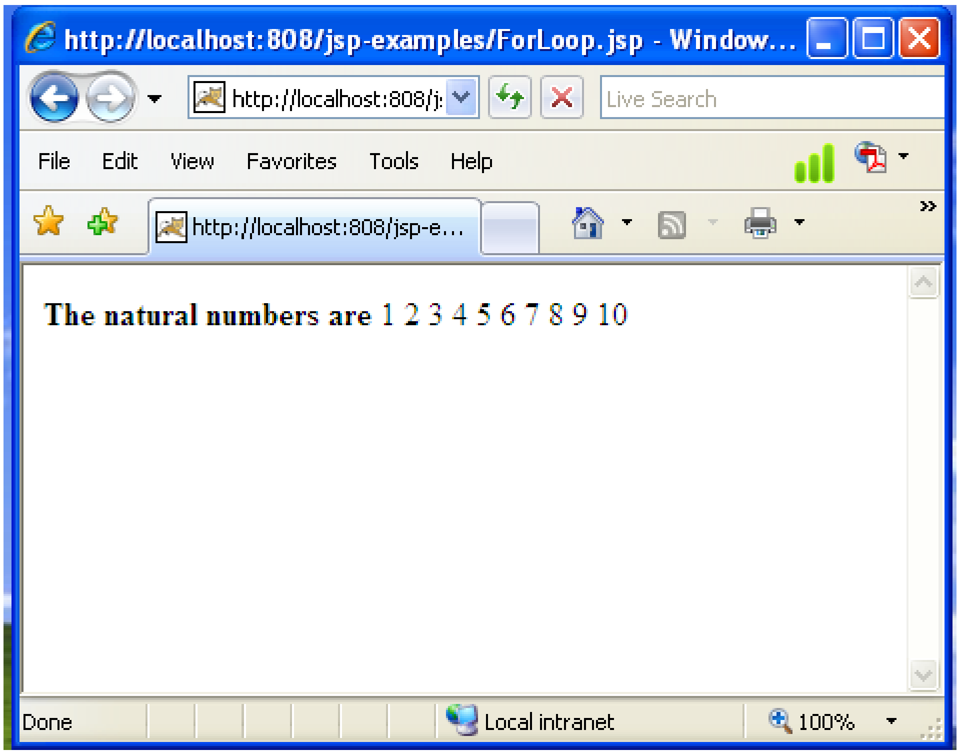
Step8:start the tomcat server.

Step9: Execute the JSP program by typing the urlhttp://localhost:808/JspExamples/ForLoop.jspin any browser.

ForLoop.jsp

```
<%@page language="java"%>
<%@taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core"%>
<html>
<body>
<b>The natural numbers are</b>
<c:forEach var="i" begin="1" end="10">
<c:out value="${i}"/>
</c:forEach>
</body>
</html>
```

OUTPUT


http://localhost:808/jsp-examples/ForLoop.jsp - Window...
http://localhost:808/j
Live Search
File
Edit
View
Favorites
Tools
Help
http://localhost:808/jsp-e...
Done
Local intranet
100%

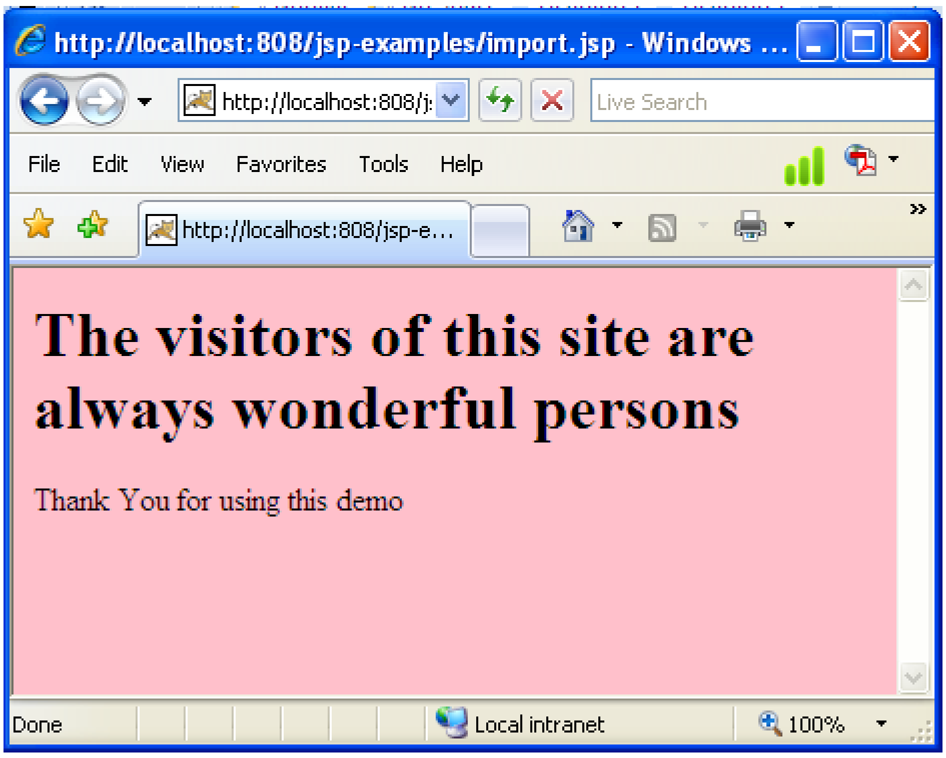
```
The natural numbers are 1 2 3 4 5 6 7 8 9 10
```

Import.jsp

```
<%@page contentType="text/html"%>
<%@taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core"%>
<html>
<body bgcolor="pink">
<c:importurl="MyPage.html"/>
<c:out value="Thank You for using this demo"/>
</body>
</html>
```

MyPage.html

```
<html>
<body>
<h1>The visitors of this site are always wonderful persons</h1>
</body>
</html>
```

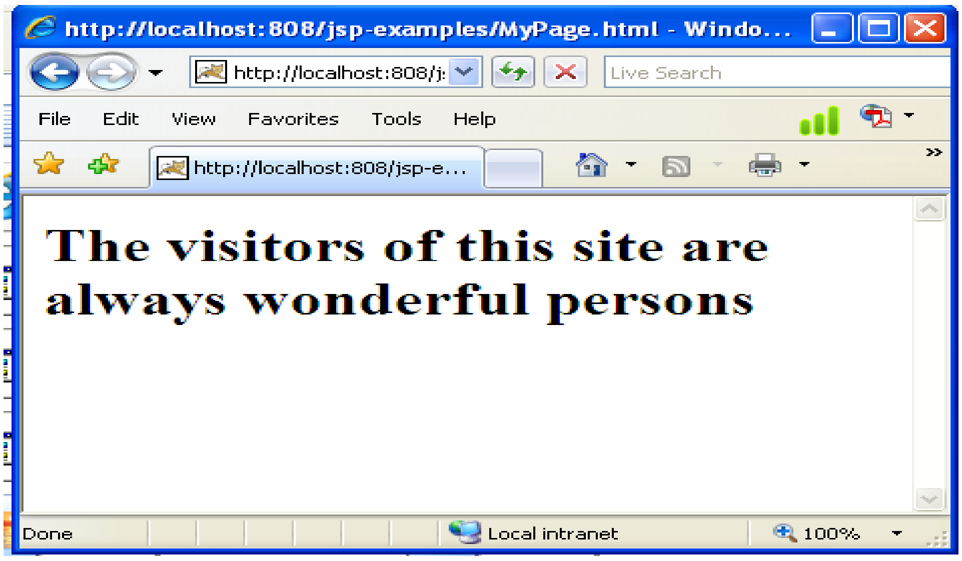

http://localhost:808/jsp-examples/import.jsp - Windows ...
http://localhost:808/j
Live Search
File
Edit
View
Favorites
Tools
Help
http://localhost:808/jsp-e...
Done
Local intranet
100%

The visitors of this site are always wonderful persons

Thank You for using this demo

Redirect.jsp

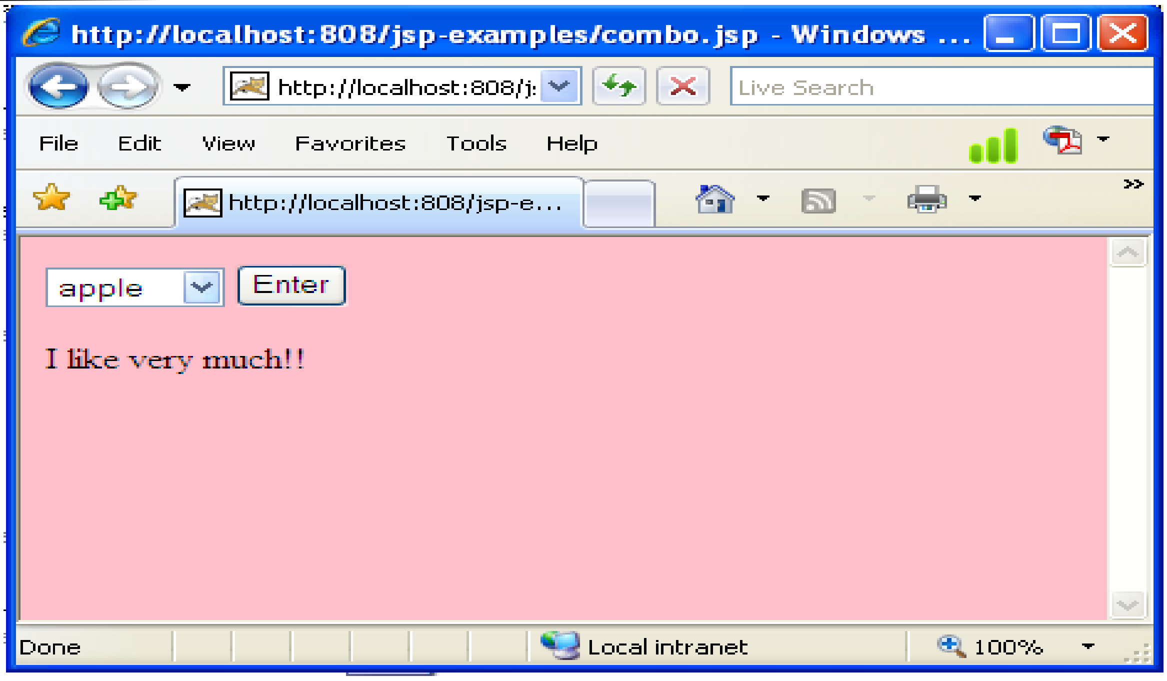
```
<%@page contentType="text/html"%>
<%@taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core"%>
<html>
<body bgcolor="pink">
<c:redirecturl="MyPage.html"/>
<c:out value="Thank You for using this demo"/>
</body>
</html>
```


http://localhost:808/jsp-examples/MyPage.html - Windo...
http://localhost:808/j
Live Search
File
Edit
View
Favorites
Tools
Help
http://localhost:808/jsp-e...
Done
Local intranet
100%

The visitors of this site are always wonderful persons

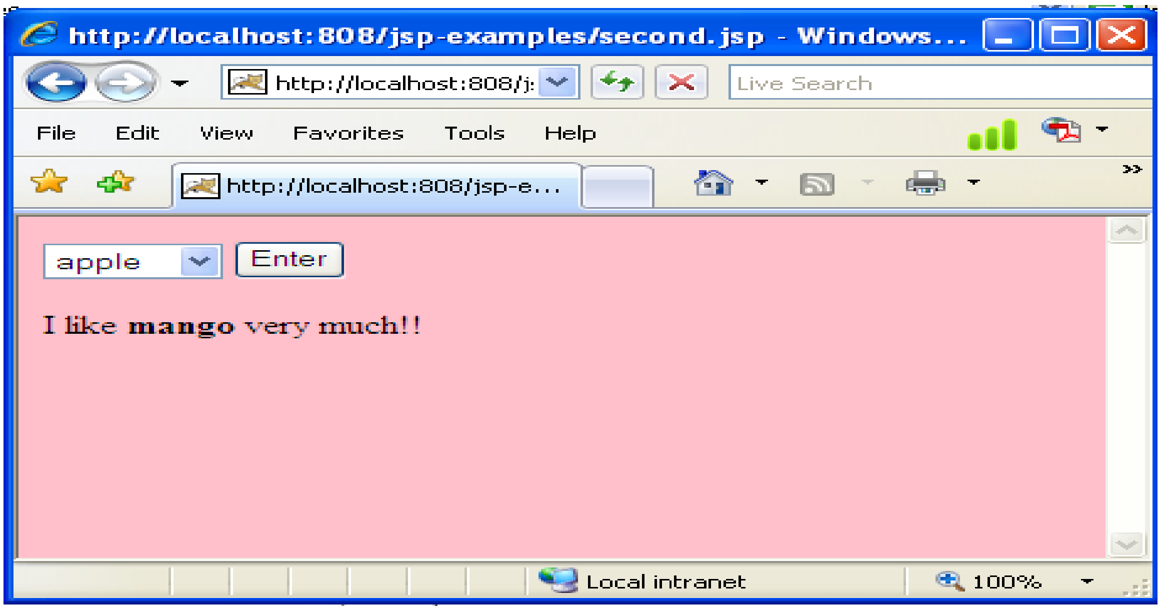
Combo.jsp

```
<%@page contentType="text/html"%>
<%@taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core"%>
<html>
<body bgcolor="pink">
<form method="post" action="second.jsp">
<select name="combo1">
<option value="apple">apple
<option value="mango">mango
<option value="banana">banana
</select>
<input type="submit" value="Enter">
</form>
<c:set var="fruit" value="${param.combo1}"/>
                              I like <strong><c:out value="${fruit}"/></strong> very much!!
<br>
</body>
</html>
```


http://localhost:808/jsp-examples/combo.jsp - Windows ...

apple Enter

I like very much!!


http://localhost:808/jsp-examples/second.jsp - Windows...

apple Enter

I like **mango** very much!!

PHP

EXERCISE NO. 37 : LOGIN FORM USING PHP

Aim: To design Login form using php.

Procedure:

Step1: Create a folder called PHP examples in E:\XAMP\XAMP\htdocs.

Step2: Open notepad by invoking programs ->Accessories -> notepad.

Step3: Type the following php code and save it as 'loginform.php' in E:\XAMP\XAMP\htdocs\php examples.

Step4: Start tomcat server by invoking E:\XAMP\XAMP\XAMP-controller and press start button.

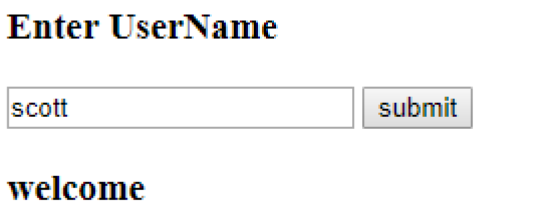
Step5: Type the urlhttp://localhost:8080/phpexamples in any browser.

Step6: Select 'loginform.php' from the list to execute the program.

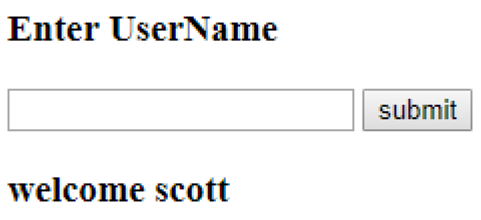
LOGIN FORM USING PHP:

```
<html>
        <head>
        </head>
        <body>
                <form method="POST">
                        <h3>Enter UserName</h3>
                        <input type="text" name="un"/>
                        <input type="submit" value="submit"/>
                </form>
                <?php
                        @$name=$_POST['un'];
                        echo "<h3>welcome $name</h3>";
                ?>
        </body>
</html>
```

OUTPUT



```
Enter UserName
scott  [submit]
welcome
```



```
Enter UserName
       [submit]
welcome scott
```

EXERCISE NO . 38 : ARITHMETIC OPERATIONS IN PHP

Aim: To illustrate Arithmetic operations in php.

Procedure:

Step1: Create a folder called **PhpExamples**in **E:\XAMP\XAMP\htdocs**.

Step2: Open notepad by invoking

programs ->Accessories -> notepad.

Step3: Type the following php code and save it as **'arth-oper.php'** in **E:\XAMP\XAMP\htdocs\Php Examples.**

Step4: Start tomcat server by invoking E:\XAMP\XAMP\XAMP-controller and press start button of apache.

Step5: Type the urlhttp://localhost:8080/PhpExamples in any browser.

Step6: Select **'arth-oper.php'**from the list to execute the program.

TO ILLUSTRATE ARITHMETIC OPERATIONS IN PHP:

```
<html>
        <head>
                <title>Arithmetical  Operators</title>
        </head>

        <body>

                <?php
                        $a = 42;
                        $b = 20;

                        $c = $a + $b;
                        echo "Addition of a and b: $c <br/>";

                        $c = $a - $b;
                        echo "Difference between a and b: $c <br/>";

                        $c = $a * $b;
                        echo "Multiplication of a and b: $c <br/>";

                        $c = $a / $b;
                        echo "Division of a and b: $c <br/>";

                        $c = $a % $b;
                        echo "Modulus of a and b: $c <br/>";
                ?>
        </body>
</html>
```

OUTPUT

```
Addition of a and b: 62
Difference between a and b: 22
Multiplication of a and b: 840
Division of a and b: 2.1
Modulus of a and b: 2
```

EXERCISE NO. 39 : RELATIONAL OPERATIONS IN PHP

Aim: To illustrate Relational operations in php.

Procedure:

Step1: Create a folder called **PhpExamples**in **E:\XAMP\XAMP\htdocs**.

Step2: Open notepad by invoking

programs ->Accessories -> notepad.

Step3: Type the following php code and save it as **'rel-oper.php'** in **E:\XAMP\XAMP\htdocs\Php Examples.**

Step4: Start tomcat server by invoking E:\XAMP\XAMP\XAMP-controller and press start button of apache.

Step5: Type the urlhttp://localhost:8080/PhpExamples in any browser.

Step6: Select **'rel-oper.php'** from the list to execute the program.

TO ILLUSTRATE RELATIONAL OPERATIONS IN PHP:

```
<html>
        <head>
                <title>Comparison  Operators</title>
        </head>
        <body>
                <?php
                        $A = 45;
                        $B = 24;

                        if( $A == $B )
                        {
                                echo "A is equal to B<br/>";
                        }
                        else
                        {
                                echo "A is not equal to B<br/>";
                        }

                        if( $A> $B )
                        {
                                echo "A is greater than  B<br/>";
                        }
                        else
                        {
                                echo "A is not greater than B<br/>";
                        }

                        if( $A< $B )
                        {
                                echo "A is less than  B<br/>";
                        }
                        else
                        {
                                echo "A is not less than B<br/>";
                        }

                        if( $A != $B )
                        {
                                echo "A is not equal to B<br/>";
                        }
                        else
                        {
                                echo "A is equal to B<br/>";
                        }

                        if( $A>= $B )
                        {
                                echo "A is either greater than or equal to B<br/>";
                        }
                        else
                        {
                                echo "A is neither greater than nor equal to B<br/>";
                        }

                        if( $A<= $B )
                        {
                                echo "A is either less than or equal to B<br/>";
                        }
                        else
                        {
                                echo "A is neither less than nor equal to B<br/>";
                        }
                ?>
        </body>
</html>
```

OUTPUT

```
A is not equal to B
A is greater than B
A is not less than B
A is not equal to B
A is either greater than or equal to B
A is neither less than nor equal to B
```

EXERCISE NO. 40 : ARRAY FUNCTIONS IN PHP

Aim: To perform Array functions in php.

Procedure:

Step1: Create a folder called **PhpExamples**in **E:\XAMP\XAMP\htdocs**.

Step2: Open notepad by invoking

programs ->Accessories -> notepad.

Step3: Type the following php code and save it as **'arr-oper.php'** in **E:\XAMP\XAMP\htdocs\Php Examples.**

Step4: Start tomcat server by invoking E:\XAMP\XAMP\XAMP-controller and press start button of apache.

Step5: Type the urlhttp://localhost:8080/PhpExamples in any browser.

Step6: Select **'arr-oper.php'** from the list to execute the program.

TO ILLUSTRATE ARRAY FUNCTIONS IN PHP:

```
<html>
        <head>
                <title>Array Functions</title>
        </head>

        <body>

                <?php
                        $states=array("Ohio","New York");
                        echo "Array elements are:";
                        foreach($states AS $i)
                        {
                                echo "<br/>{$i}";
                        }

                        array_unshift($states,"California","Texas");
                        echo "<br/><br/>After adding values to the front of an Array:";
                        foreach($states AS $i)
                        {
                                echo "<br/>{$i}";
                        }

                        array_push($states,"Florida");
                        echo "<br/><br/>After adding value to the end of an Array:";
                        foreach($states AS $i)
                        {
                                echo "<br/>{$i}";
                        }

                        array_shift($states);
                        echo "<br/><br/>After removing a value to the front of an Array:";
                        foreach($states AS $i)
                        {
                                echo "<br/>{$i}";
                        }

                        array_pop($states);
                        echo "<br/><br/>After removing a value to the front of an Array:";
                        foreach($states AS $i)
                        {
                                echo "<br/>{$i}";
                        }

                        $state="Ohio";
                        if(in_array($state,$states))
                        echo "<br/><br/>Not to worry,$state is smoke free";
                ?>
        </body></html>
```

OUTPUT:

```
Array elements are:
Ohio
New York

After adding values to the front of an Array:
California
Texas
Ohio
New York

After adding value to the end of an Array:
California
Texas
Ohio
New York
Florida

After removing a value to the front of an Array:
Texas
Ohio
New York
Florida

After removing a value to the front of an Array:
Texas
Ohio
New York

Not to worry, Ohio is smoke free
```

EXERCISE NO. 41 : FILE OPERATIONS IN PHP

Aim: To perform file operations in php.

Procedure:

Step1: Create a folder called **PhpExamples**in **E:\XAMP\XAMP\htdocs**.

Step2: Open notepad by invoking

programs ->Accessories -> notepad.

Step3: Type the following php code and save it as **'fileoperations.php'** in **E:\XAMP\XAMP\htdocs\Php Examples.**

Step4: Start tomcat server by invoking E:\XAMP\XAMP\XAMP-controller and press start button of apache.

Step5: Type the urlhttp://localhost:8080/PhpExamples in any browser.

Step6: Select **'fileoperations.php'** from the list to execute the program.

TO ILLUSTRATE FILE OPERATIONS IN PHP:

```
<html>
        <head>
                <title>file Operators</title>
        </head>

        <body>

                <?php
                        $f1='my_setting.txt';
                        $fh=fopen($f1,'w');
                        $text="localhost;root;pwd 1234;my_database";
                        fwrite($fh,$text);
                        fclose($fh);
                        echo "File 'my_setting.txt' written successfully";
                ?>
        </body>
</html>
```

<u>OUTPUT:</u>

```
File 'my_setting.txt' written successfully
```

EXERCISE NO.42 : DATE AND TIME FUNCTIONS IN PHP

Aim: To perform date and time functions in php.

Procedure:

Step1: Create a folder called **PhpExamples**in **E:\XAMP\XAMP\htdocs**.

Step2: Open notepad by invoking

programs ->Accessories -> notepad.

Step3: Type the following php code and save it as **‘dateTime.php’** in **E:\XAMP\XAMP\htdocs\Php Examples.**

Step4: Start tomcat server by invoking E:\XAMP\XAMP\XAMP-controller and press start button of apache.

Step5: Type the urlhttp://localhost:8080/PhpExamples in any browser.

Step6: Select **‘dateTime.php’** from the list to execute the program.

TO ILLUSTRATE DATE AND TIME FUNCTIONS IN PHP:

```
<html>
        <head>
                <title>Date and Time functions</title>
        </head>

        <body>
                <?php
                        echo "Time stamp is ".time()."<br/>";
                        echo "Today is ".date("y/m/d")."<br/>";
                        echo "The time is ".date("h:i:sa")."<br/>";
                        date_default_timezone_set("America/New_York");
                        echo "The Default time is ".date("h:i:sa")."<br/>";

                        $d=mktime(11,14,54,10,13,2017);
                        echo "Created date is ".date("y/m/d",$d)."<br/>";

                        $d=strtotime("10:30pm November 25 2017");
                        echo "Created date and time is ".date("y/m/d h:i:sa",$d)."<br/>";

                        $d=strtotime("next  Saturday");
                        echo "Next Saturday date is ".date("y/m/d h:i:sa",$d)."<br/>";

                ?>
        </body>
</html>
```

OUTPUT:

```
Time stamp is 1510535646
Today is 17/11/13
The time is 02:14:06am
The Default time is 08:14:06pm
Created date is 17/10/13
Created date and time is 17/11/25 10:30:00pm
Next Saturday date is 17/11/18 12:00:00am
```

EXERCISE NO. 43 : NAME SPACES IN PHP

Aim: To illustrate namespace in php.

Step1: Create a folder called **PhpExamples**in **E:\XAMP\XAMP\htdocs**.

Step2: Open notepad by invoking

programs ->Accessories -> notepad.

Step3: Type the following php code and save it as **'nameSpace.php'** in **E:\XAMP\XAMP\htdocs\Php Examples.**

Step4: Start tomcat server by invoking E:\XAMP\XAMP\XAMP-controller and press start button of apache.

Step5: Type the urlhttp://localhost:8080/PhpExamples in any browser.

Step6: Select **'nameSpace.php'** from the list to execute the program.

TO ILLUSTRATE NAMESPACE IN PHP:

lib1.php

```
<html>
      <head>
      </head>
      <body>
            <?php
                  // application library 1
                  namespace App\Lib1;
                  const MYCONST = 'App\Lib1\MYCONST';
                  function MyFunction()
                  {
                      return __FUNCTION__;
                  }
                  class MyClass
                  {
                      static function WhoAmI()
                      {
                              return __METHOD__;
                      }
                  }
            ?>
        </body>
</html>
```

lib2.php

```
<html>
    <head>
    </head>
    <body>
            <?php
                      // application library 2
                      namespace App\Lib2;
                      const MYCONST = 'App\Lib2\MYCONST';
                      function MyFunction()
                      {
                        return __FUNCTION__;
                      }
                      class MyClass
                      {
                        static function WhoAmI()
                        {
                              return __METHOD__;
                        }
                      }
            ?>
```

myapp3.php:

```
    <html>
            <head>
            </head>
            <body>
                        <?php
                            use App\Lib1 as L;
                            use App\Lib2\MyClass as Obj;

                            header('Content-type: text/plain');
                            require_once('lib1.php');
                            require_once('lib2.php');

                            echo L\MYCONST . "\n";
                            echo L\MyFunction() . "\n";
                            echo L\MyClass::WhoAmI() . "\n";
                            echo Obj::WhoAmI() . "\n";
                        ?>
            </body>
</html>
```

OUTPUT:

```
App\Lib\MYCONST
App\Lib\MYFunction
App\Lib\MYClass::WhoAmI
```

EXERCISE NO.44 : CLASS OBJECT ILLUSTRATION IN PHP

Aim: To illustrate class-object concept in php.

Procedure:

Step1: Create a folder called **PhpExamples**in **E:\XAMP\XAMP\htdocs**.

Step2: Open notepad by invoking

programs ->Accessories -> notepad.

Step3: Type the following php code and save it as **'classObject.php'** in **E:\XAMP\XAMP\htdocs\Php Examples.**

Step4: Start tomcat server by invoking E:\XAMP\XAMP\XAMP-controller and press start button of apache.

Step5: Type the urlhttp://localhost:8080/PhpExamples in any browser.

Step6: Select **'classObject.php'** from the list to execute the program.

TO ILLUSTRATE CLASS-OBJECT CONCEPT IN PHP:

```
<html>
        <head>
                <title>ClassDemo</title>
        </head>
        <body>
                <?php
                        class Employee
                        {
                                public $name;
                                public $age;
                                public function setDetails($x,$y)
                                {
                                        $this->name=$x;
                                        $this->age=$y;
                                }
                                public function getDetails()
                                {
                                        echo "Employee  Name:$this->name";
                                        echo "<br/>";
                                        echo "Employee  Age:$this->age";
                                }
                        }
                        $emp=new Employee();
                        $emp->setDetails("ram","29");
                        $emp->getDetails();
                ?>
        </body>
</html>
```

OUTPUT:

```
Employee Name: ram
Employee Age:29
```

EXERCISE NO. 45 : INHERITANCE ILLUSTRATION IN PHP

Aim: To illustrate inheritance concept in php.

Procedure:

Step1: Create a folder called **PhpExamples**in **E:\XAMP\XAMP\htdocs**.

Step2: Open notepad by invoking

programs ->Accessories -> notepad.

Step3: Type the following php code and save it as **'inheritance.php'** in **E:\XAMP\XAMP\htdocs\Php Examples.**

Step4: Start tomcat server by invoking E:\XAMP\XAMP\XAMP-controller and press start button of apache.

Step5: Type the urlhttp://localhost:8080/PhpExamples in any browser.

Step6: Select **'inheritance.php'** from the list to execute the program.

TO ILLUSTRATE SINGLE INHERITANCE CONCEPT IN PHP:

```
<html>
        <head>
                <title>Inheritance Concepts</title>
        </head>
        <body>
                <?php
                        class Car
                        {
                                public $model;
                                public function setModel($a)
                                {
                                        $this->model=$a;
                                }
                                public function getModel()
                                {
                                        return $this->model;
                                }
                        }
                        class SportsCar extends Car
                        {
                                public $style;
                                public function setStyle($b)
                                {
                                        $this->style=$b;
                                        return 'Car name:'.$this->getModel().'<br/>'.'Car
                                                Model:'.$this->style;
                                }
                        }
                        $obj=new SportsCar();
                        $obj->setModel('Ferrari');
                        echo $obj->setStyle('F15');
                ?>
        </body>
</html>
```

OUTPUT:

```
Car name:Ferrari
Car Model:F15
```

EXERCISE NO. 46 : INTERFACE ILLUSTRATION IN PHP

Aim: To illustrate interface concept in php.

Procedure:

Step1: Create a folder called **PhpExamples**in **E:\XAMP\XAMP\htdocs**.

Step2: Open notepad by invoking

programs ->Accessories -> notepad.

Step3: Type the following php code and save it as **'interfaceDemo.php'** in **E:\XAMP\XAMP\htdocs\Php Examples.**

Step4: Start tomcat server by invoking E:\XAMP\XAMP\XAMP-controller and press start button of apache.

Step5: Type the urlhttp://localhost:8080/PhpExamples in any browser.

Step6: Select **'interfaceDemo.php'** from the list to execute the program.

TO ILLUSTRATE AN INTERFACE IN PHP:

```
<html>
        <head>
                <title>Interface  Concepts</title>
        </head>
        <body>
                <?php
                        interface Deposit
                        {
                                public function interest();
                        }
                        class Simple implements Deposit
                        {
                                public $p;
                                public  $t;
                                public $r;
                                public function  Simple1($a,$b,$c)
                                {
                                        $this->p=$a;
                                        $this->t=$b;
                                        $this->r=$c;
                                }
                                public $sim;
                                public $stot;
                                public function interest()
                                {
                                        $this->sim=($this->p*$this->t*$this->r)/100;
                                        echo "Simple interest:$this->sim<br/>";
                                        $this->stot=$this->sim+$this->p;
                                        return $this->stot;
                                }
                        }
                        class Compound extends Simple implements Deposit
                        {
                                public $com;
                                public $ctot;
                                public function compound1($a,$d,$q)
                                {
                                         parent::simple1($a,$d,$q);
                                }
                                public function interest()
                                {
                                $this->com=$this->p*pow((1+$this->r)/100,$this->t);
                                        echo "Compound interest:$this->com<br/>";
                                        $this->ctot=$this->p+$this->com;
                                return $this->ctot;
                                }
```

```
                    }
                              $p=new Simple();
                              $p->simple1(10000,2,3);
                              $a=$p->interest();
                              echo "Principle with simple interest:$a<br/>";
                              $q=new Compound();
                              $q->compound1(10000,2,3);
                              $b=$q->interest();
                              echo "Principle with compound interest:$b";
                    ?>
          </body>
</html>
```

OUTPUT:

```
Simple interest:600
Principle with simple interest:10600
Compound interest:16
Principle with compound interest:10016
```