



B-27, Knowledge Park – III, Greater Noida Uttar Pradesh - 201308
Approved by: All India Council for Technical Education (AICTE), New Delhi
Affiliated to: Dr. A. P. J. Abdul Kalam Technical University (AKTU), Lucknow

**DEPARTMENT OF COMPUTER SCIENCE AND
ENGINEERING**

Web Designing Workshop

B.Tech., Semester -III

Subject Code: BCS-353

Session: 2024-25, ODD Semester

Table of Contents

1. Vision and Mission of the Institute.
2. Vision and Mission of the Department.
3. Program Outcomes (POs).
4. Program Educational Objectives and Program Specific Outcomes (PEOs and PSOs).
5. University Syllabus.
6. Course Outcomes (COs).
7. Course Overview.
8. List of Experiments mapped with COs.
9. DO's and DON'Ts.
10. General Safety Precautions.
11. Guidelines for students for report preparation.
12. Lab Experiments

DRONACHARYA GROUP OF INSTITUTIONS GREATER NOIDA

VISION

- Instilling core human values and facilitating competence to address global challenges by providing Quality Technical Education.

MISSION

- M1 - Enhancing technical expertise through innovative research and education, fostering creativity and excellence in problem-solving.
- M2 - Cultivating a culture of ethical innovation and user-focused design, ensuring technological progress enhances the well-being of society.
- M3 - Equipping individuals with the technical skills and ethical values to lead and innovate responsibly in an ever-evolving digital land

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VISION

Promoting technologists by imparting profound knowledge in information technology, all while instilling ethics through specialized technical education.

MISSION

- Delivering comprehensive knowledge in information technology, preparing technologists to excel in a rapidly evolving digital landscape.
- Building a culture of honesty and responsibility in tech, promoting smart and ethical leadership.
- Empowering individuals with specialized technical skills and ethical values to drive positive change and innovation in the tech industry.

Program Outcomes (POs)

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 engineering problems 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 engineering practice.

PO 9: Individual and teamwork: 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.

Programme Educational Objectives (PEOs)

PEO1: To enable graduates to pursue higher education and research, or have a successful career in industries associated with Computer Science and Engineering, or as entrepreneurs.

PEO2: To ensure that graduates will have the ability and attitude to adapt to emerging technological changes.

PEO3: To prepare students to analyze existing literature in an area of specialization and ethically develop innovative methodologies to solve the problems identified.

Program Specific Outcomes (PSOs)

PSO1: To analyze, design and develop computing solutions by applying foundational concepts of Computer Science and Engineering.

PSO2: To apply software engineering principles and practices for developing quality software for scientific and business applications.

PSO3: To adapt to emerging Information and Communication Technologies (ICT) to innovate ideas and solutions to existing/novel problems.

CO–POMapping

BCS-353.1	Practicevarious SortingandSearching Algorithms.
BCS-353.2	Analyzetherecursiveimplementationofdifferentsortingand searching algorithms.
BCS-353.3	ExercisevariousdataStructureoperationsusingstaticanddynamicmemory allocation.
BCS-353.4	Demonstratevariousoperationsliketraversal,insertion,deletionontreedata structure.
BCS-353.5	IllustrateandImplement practicalapplicationsbased ongraphsand shortest paths.

CO-PSOMapping:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	-	2	-	-	-	-	1	1	2
CO2	3	3	3	-	2	-	-	-	-	1	1	2
CO3	3	2	3	-	2	-	-	-	-	1	1	2
CO4	3	3	3	-	2	-	-	-	-	1	1	2
CO5	3	3	3	-	2	-	-	-	-	1	1	3

PSO1	PSO2	PSO3
1	2	1
1	3	1
1	3	1
2	2	1
2	2	1

DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

GENERAL LABORATORY INSTRUCTIONS

1. Students are advised to come to the laboratory at least 5 minutes before (to the starting time), those who come after 5 minutes will not be allowed into the lab.
2. Plan your task properly much before to the commencement, come prepared to the lab with the synopsis / program / experiment details.
3. Students should enter into the laboratory with:
 - a. Laboratory observation notes with all the details (Problem statement, Aim, Algorithm, Procedure, Program, Expected Output, etc.,) filled in for the lab session.
 - b. Laboratory Record updated up to the last session experiments and other utensils (if any) needed in the lab.
 - c. Proper Dress code and Identity card.
4. Sign in the laboratory login register, write the TIME-IN, and occupy the computer system allotted to you by the faculty.
5. Execute your task in the laboratory, and record the results / output in the lab observation note book, and get certified by the concerned faculty.
6. All the students should be polite and cooperative with the laboratory staff, must maintain the discipline and decency in the laboratory.
7. Computer labs are established with sophisticated and high end branded systems, which should be utilized properly.
8. Students / Faculty must keep their mobile phones in SWITCHED OFF mode during the lab sessions. Misuse of the equipment, misbehaviors with the staff and systems etc., will attract severe punishment.
9. Students must take the permission of the faculty in case of any urgency to go out ; if anybody found loitering outside the lab / class without permission during working hours will be treated seriously and punished appropriately.
10. Students should LOG OFF/ SHUT DOWN the computer system before he/she leaves the lab after completing the task (experiment) in all aspects. He/she must ensure the system / seat is kept properly.

Objectives:

- To develop an ability to design and implement static and dynamic website
- Choose best technologies for solving web client/server problems
- Create conforming web pages
- Use JavaScript for dynamic effects
- To prepare PHP scripts
- Use JavaScript & PHP to validate form input entry
- Understand, analyze and create XML documents and XML Schema
- Understand, analyze and build web applications using PHP
- Use appropriate client-side or Server-side applications
- Handling Cookies and Sessions using PHP, SERVLETS and JSP
- Manage normal and abnormal interactions with databases using JDBC.

Outcomes:**Upon successful completion of this course, the students will be able to:**

- Design and implement dynamic websites with good aesthetic sense of designing and latest technical know-how's
- Create web pages using HTML and Cascading Styles sheets
- Analyze a web page and identify its elements and attributes
- Create dynamic web pages using JavaScript
- Build web applications using PHP
- Create XML documents and XML Schema
- Understand, analyze and apply the role of languages like HTML, CSS, XML, JavaScript, PHP, SERVLETS, JSP and protocols in the workings of the web and web applications
- Have a good grounding of Web Application Terminologies, Internet Tools, E – Commerce and other web services
- Develop interactive web applications using HTML forms and servlets.
- Use request and response objects provided to a servlet to read parameters and to produce an HTML response.
- Develop JSP applications implementing Session management and Database Connectivity.

INDEX

S.No	List of programs	Pg.No.
1	Design the following static web pages required for an online book store web site. 1) HOMEPAGE: The static home page must contain three frames. 2) LOGIN PAGE 3) CATALOGUE PAGE: The catalogue pages should contain the details of all the books available in the web site in a table. 4) REGISTRATION PAGE	1-8
2	Write JavaScript to validate the following fields of the Registration page. 1. First Name (Name should contain alphabets and the length should not be less than 6 characters). 2. Password (Password should not be less than 6 characters length). 3. E-mail id (should not contain any invalid and must follow the standard pattern name@domain.com) 4. Mobile Number (Phone numbers should contain 10 digits only). 5. Last Name and Address (should not be empty).	9-14
3	Develop and demonstrate the usage of inline, internal and external style sheet using CSS	15-17
4	Develop and demonstrate JavaScript with POP-UP boxes and functions for the following problems: a) Input: Click on Display Date button using onclick() function Output: Display date in the textbox b) Input: A number obtained using prompt Output: Factorial of n number using alert c) Input: A number obtained using prompt Output: A multiplication table of numbers from 1 to 10 of n using alert d) Input: A number obtained using prompt and add another number using confirm Output: Sum of the entire n numbers using alert	18-21
5	Write an HTML page that contains a selection box with a list of 5 countries. When the user selects a country, its capital should be printed next in the list. Add CSS to customize the properties of the font of the capital (color, bold and font size).	22

6	Write an HTML page including any required JavaScript that takes a number from text field in the range of 0 to 999 and shows it in words. It should not accept four and above digits, alphabets and special characters.	23-24
7	Develop and demonstrate PHP Script for the following problems: a) Write a PHP Script to find out the Sum of the Individual Digits. b) Write a PHP Script to check whether the given number is Palindrome or not	25-26
8	Create an XML document that contains 10 users information. Write a Java Program, which takes User Id as input and returns the user details by taking the user information from XML document using DOM parser or SAX parser.	27-29
9	Implement the following web applications using (a) PHP (b) Servlets (c) JSP	30-35 36-44 45-51
	i A web application that takes a name as input and on submit it shows a hello <name> page where name is taken from the request. It shows the start time at the right top corner of the page and provides a logout button. On clicking this button, it should show a logout page with Thank You <name> message with the duration of usage (hint: Use session to store name and time).	
	ii Write a PHP Program to display current Date, Time and Day.	
	iii A web application that takes name and age from an HTML page. If the age is less than 18, it should send a page with "Hello <name>, you are not authorized to visit the site" message, where <name> should be replaced with the entered name. Otherwise it should send "Welcome <name> to this site" message.	
	iv A web application that lists all cookies stored in the browser on clicking "List Cookies" button. Add cookies if necessary.	
10	Implement the web applications with Database using (a) PHP, (b) Servlets and (c) JSP.	52-57
11	Modify the above PHP program to use an XML instead of database	58-59
12	Write a program to design a simple calculator using (a) JavaScript (b) PHP (c) Servlet and (d) JSP.	60-67

WEBDESIGNINGLAB

WEEK1:

Design the following static web pages required for an online bookstore website.

1) **HOMEPAGE:** The static home page must contain three **frames**.

2) **LOGINPAGE**

3) **CATALOGUEPAGE:** The catalogue pages should contain the details of all the books available in the web site in a table.

4) **REGISTRATIONPAGE**

Aim: Design the following static web pages required for an online bookstore.

1. **Homepage:** - the static home page must contain three pages

2. **Top frame:** - logo and college name and links to homepage, login page, registration page and catalogue page

3. **Left frame:** - at least four links for navigation which will display the catalogue of respective links

4. **Right frame:** - the pages to links in the left frame must be loaded here initially it contains the description of the website.

DESCRIPTION: In this program the entire web page is created by using basic HTML tags. Homepage is divided into 3 frames by using `<frameset>` and `<frame>` tags. A frame is used to display a web page within a web page.

<frameset>:

- The `<frameset>` tag defines a frameset.
- The `<frameset>` element holds one or more `<frame>` elements.
- Each `<frame>` element can hold a separate document.
- The `<frameset>` element specifies HOW MANY columns or rows there will be in the frameset, and HOW MUCH percentage/pixels of space will occupy each of them.

<frame>:

- The `<frame>` tag defines one particular window (frame) within a `<frameset>`.
- Each `<frame>` in a `<frameset>` can have different attributes, such as border, scrolling, the ability to resize, etc.

PROGRAM:

home.html:

```
<frameset rows="40%,*">
  <framesrc="top.html" noresize scrolling="NO" name="topframe">
</frameset>
<frameset cols="25%,*">
  <framesrc="left.html" noresize scrolling="NO" name="leftframe">
  <framesrc="right.html" noresize name="rightframe" scrolling="auto">
</frameset>
</frameset>
```

top.html:

```
<html>
<head>
  <title>TopFrame</title>
</head>
<body bgcolor="YellowGreen">
  
```

WEBDESIGNINGLAB

```
<imgsrc="images/cse.png"width="125"height="115"align="right">
<center>
  <marqueebgcolor="yellow"width="650"behavior="alternate">
    <fontface="BrushScriptMT"size="8"color="green"><b><i>OnlineBookStore</i></b>
    </font>
  </marquee><br>
  <font face="Brush Script" size="6" color="white"><b>Created & Maintained By
  MRCET</b></font>
</center>
<br>
<tablewidth="100%"height="50%"cellspacing=10>
<tralign="center">
  <td> <a href="Home.html"target="_parent"><fontface="BrushScript"size="6"
color="navy">HOME </a></td>
  <td><a href="login.html"target="rightframe"><fontface="BrushScript"size="6"
color="navy">LOGIN</a></td>
  <td><a href="registration.html" target="rightframe"><font face="Brush Script"
size="6" color="navy">REGISTER </a></td>
  <td><a href="catalogue.html"target="rightframe"><fontface="BrushScript" size="6"
color="navy">CATALOGUE</a></td>
</tr>
</table>
</body>
</html>
```

left.html:

```
<html>
  <bodyalign="center"bgcolor="bisque"><br>
    <a href="cse.html"target="rightframe"><fontsize="6">CSE</font></a><br><br>
    <a href="ece.html"target="rightframe"><fontsize="6">ECE</font></a><br><br>
    <a href="eee.html"target="rightframe"><fontsize="6">EEE</font></a><br><br>
    <a href="mech.html"target="rightframe"><fontsize="6">MECH</font></a><br>
  </body>
</html>
```

right.html:

```
<html>
  <bodybgcolor="orange">
    <center>
      <imgsrc="images/Books.jpg"height="170"><br>
      <fontface="Brush ScriptMT"size="5" color="blue">
        <h1><b>WelcometotheOnlineBook Store!!</b></font><br>
      <fontface="Brush ScriptMT"size="5" color="red">
        <h2><b>"AHugeCollectionOfEngineeringE-Books"</b></h2></font>
      </center>
    </body>
  </html>
```

WEBDESIGNINGLAB

cse.html:

```
<html>
  <head><title>CSE</title></head>
  <bodybgcolor="cyan">
    <center><fontcolor="blue"><h1>ComputerScienceandEngineering</h1></font></center>
    <br>
    <tablealign="center">
      <tr>
        <td>TextBooks</td>
        <td>
          <select>
            <optionvalue="selectthebook"selected>Selectthebook
            <optionvalue="C&Ds">C&Ds
            <optionvalue="Ads">Ads
            <optionvalue="Java">Java
            <optionvalue="Oracle">Oracle
            <optionvalue="Ms SQLServer">MsSQLServer
            <optionvalue="MySql">MySql
          </select>
        </td></tr>
      <tr>
        <td>Quantity</td>
        <td><inputtype="text" id="q"></td>
      </tr>
      <tr>
        <td></td>
        <td>
          <formmethod=post action="order.html">
            <inputtype="submit" value=ok />
          </form>
        </td>
      </tr>
    </table>
    <center>
      <pre>Costofonebook is"500"+shipping"100"</pre>
    </center>
  </body>
</html>
```

ece.html:

```
<html>
  <bodybgcolor="Plum">
    <h1><fontcolor="blue">ElectronicsandCommunicationEngineering</font></h1>
    <h2>
      <ul>
        <li>DigitalCircuits</li><li>SignalsandSystems</li><li>Digital Communication</li>
      </ul>
    </h2>
  </body>
</html>
```

```
<html>  
<head>  
    <title>Catalogue</title>  
</head>  
<bodybgcolor="pink">  
    <formaction="order.html">  
        <tableborder="1"width="100%">  
            <tr>  
                <td>  
                    <imgsrc="images/wt.jpg"width=100height=100/>  
                </td>  
                <td>Book:WebTechnologies<br>Author:UttamK.Roy<br>Publication:Oxford  
                    University Press</td><td>531 &nbsp;  &nbsp; &nbsp;   &nbsp; &nbsp; &nbsp;   &nbsp;  &nbsp; &nbsp; &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&~  
                <td><inputtype="submit"value="Addtocart"/></td></tr>  
            <tr>  
                <td><imgsrc="images/php.jpg"width=100 height=100/></td>  
                <td> Book: PHP & MySQL Web Development <br> Author:Luke Welling & Laura  
                    Thompson<br>Publication:PEARSON</td><td>898&nbsp;  &nbsp; &nbsp;   &nbsp; &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&~  
                <td><inputtype="submit"value="Addtocart"/></td></tr>  
        </table></form>  
    </body></html>
```

login.html:

registration.html:

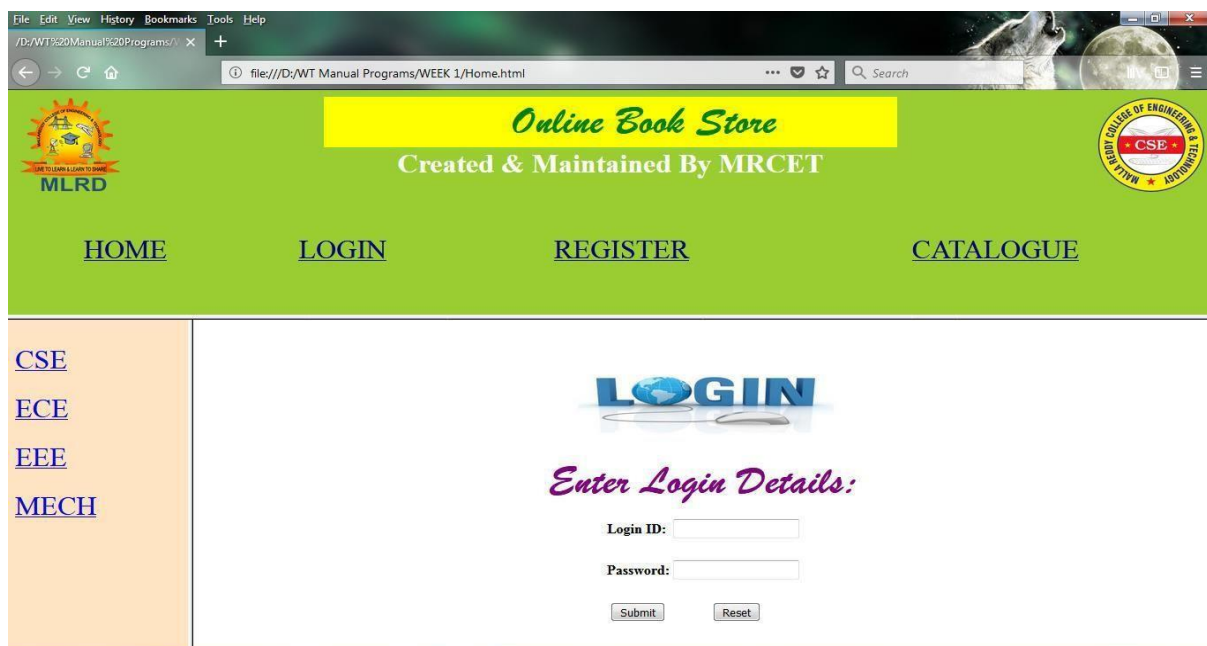
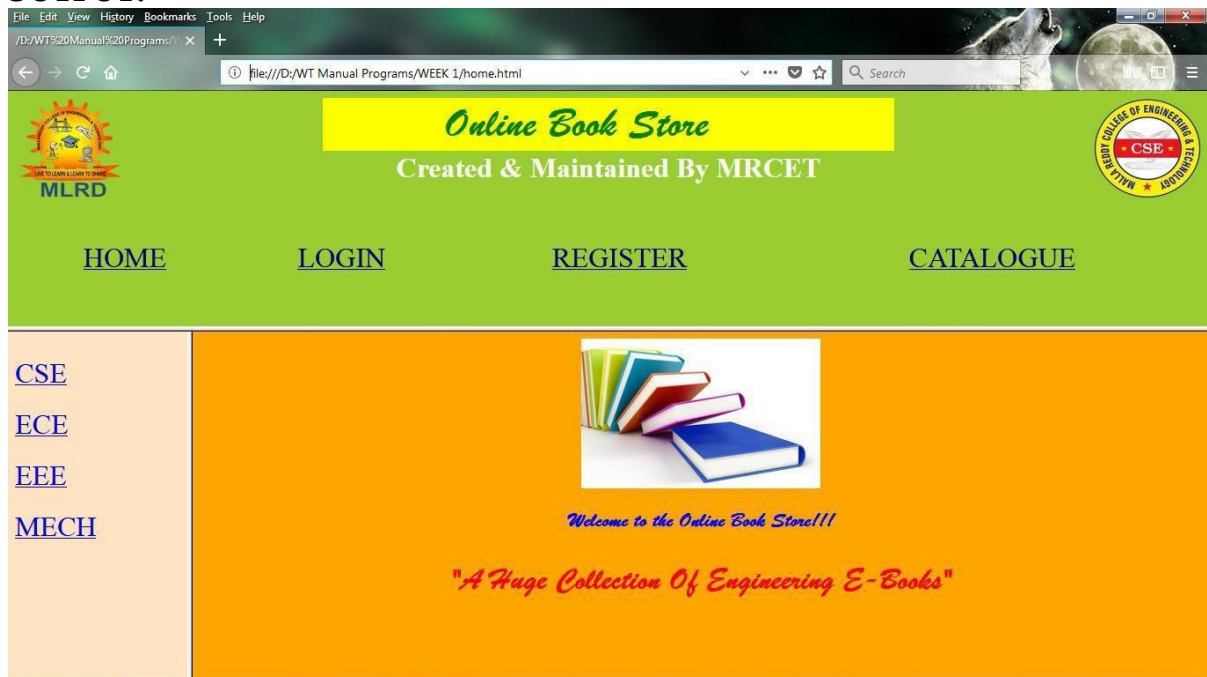
[illegible]

WEBDESIGNINGLAB

order.html:

```
<html>
<head><title>orderconformation</title></head>
<bodybgcolor="cyan">
  <center>
    <pre><strong>
      <b>YourorderIs Conformed
    </strong></pre>
    <h2><b>THANKYOU...VisitAgain</h2>
  </center>
</body>
</html>
```

OUTPUT:



WEBDESIGNINGLAB

File Edit View History Bookmarks Tools Help
/D:/WT%20Manual%20Programs/ X +
file:///D:/WT Manual Programs/WEEK 1/Home.html Search



Online Book Store

Created & Maintained By MRCET

[HOME](#) [LOGIN](#) [REGISTER](#) [CATALOGUE](#)

[CSE](#)
[ECE](#)
[EEE](#)
[MECH](#)

Registration Form

First Name(Minimum 6 characters)*

Last Name*

EmailAddress*
(one e-mail id only): e.g. smith@hotmail.com

Password(minimum 6 characters)*

Address*

Mobile No*

Gender: ☐ male ☐ female

file:///D:/WT Manual Programs/WEEK 1/Home.html Search



Online Book Store

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CSE ECE EEE MECH		Book: Web Technologies Author: Uttam K. Roy Publication:Oxford University Press	531	Add to cart
		Book: PHP & MySQL Web Development Author:Luke Welling & Laura Thompson Publication:PEARSON	898	Add to cart

file:///D:/WT Manual Programs/WEEK 1/Home.html Search



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[CSE](#)
[ECE](#)
[EEE](#)
[MECH](#)

Computer Science and Engineering

Text Books: Web Technologies ▾

Quantity:

Cost of one book is"500" + shipping "100"

WEBDESIGNINGLAB



EXERCISE:

1. Create your class timetable in a web page.
2. Design the static web pages required for an online shopping cart.

WEEK2:WriteJavaScriptto validate the following fields of the Registration page.

1. **First Name** (Name should contain alphabets and the length should not be less than 6 characters).
2. **Password** (Password should not be less than 6 characters length).
3. **E-mail id** (should not contain any invalid and must follow the standard pattern name@domain.com)
4. **Mobile Number** (Phone numbers should contain 10 digits only).
5. **Last Name and Address** (should not be Empty).

AIM: To validate the fields of registration page using JavaScript

DESCRIPTION: In order to validate the fields of login and registration pages JavaScript is used. JavaScript is programming code that can be inserted into HTML pages. JavaScript inserted into HTML pages, can be executed by all modern web browsers. JavaScript is mainly used for validating the elements in a form submitted by the user. This JavaScript code can react to user events.

PROGRAM: After clicking OK button the page is redirected to success.html

```
<html>
<head><title>RegistrationFormValidation</title></head>
<body bgcolor="#E4F0F8">
  <script type='text/javascript'>
    function formValidator()
    {
      //Make quick references to our fields
      var firstname=document.getElementById('firstname');
      var lastname = document.getElementById('lastname');
      var email = document.getElementById('email');
      var pass=document.getElementById('pass');
      var addr=document.getElementById('addr');
      var mobileno=document.getElementById('mobileno');

      //Check each input in the order that it appears in the form!
      if(notEmpty(firstname, "can not be null")){
        if(isAlphabet(firstname, "Please enter only letters for your Firstname")){ if(lengthRestriction(firstname,
        6)){
          if(isAlphabet(lastname, "Please enter only letters for your
          Lastname")){ if(emailValidator(email, "Please enter a valid email
          address")){
            if(lengthRestriction(pass, 6)){
              if(isAlphanumeric(pass, "please enter Numbers and Letters Only for
              password")){ if(notEmpty(addr, "please enter the address")){
                if(isNumeric(mobileno, "Please enter a valid
                mobileno")){ if(lengthRestriction1(mobileno, 10, 10)){
                  return true;
                }
              }
            }
          }
        }
      }
    }
    return false;
  }
}
function notEmpty(elem, helperMsg){
```

```
        if(elem.value.length ==
            0) {alert(helperMsg);
            elem.focus();//setthefocustothisinput return
            false;
        }
        returntrue;
    }
}

functionisNumeric(elem,helperMsg){
    var numericExpression = /^[0-9]+$/;
    if(elem.value.match(numericExpression)){
        return true;
    }else{
        alert(helperMsg);
        elem.focus();
        return false;
    }
}

function isAlphabet(elem,
    helperMsg){varalphaExp=
    /^[a-zA-Z]+$/;
    if(elem.value.match(alphaExp)){
        returntrue;
    }else{
        alert(helperMsg);
        elem.focus();
        return false;
    }
}

function isAlphanumeric(elem,
    helperMsg){varalphaExp=/^[0-9a-
    zA-Z]+$/;
    if(elem.value.match(alphaExp)){
        returntrue;
    }else{
        alert(helperMsg);
        elem.focus();
        return false;
    }
}

function lengthRestriction(elem,
    min){varuInput=elem.value;
    if(uInput.length >= min){
        returntrue;
    }else{
        alert("Pleaseenterminimum"+min+"characters"); elem.focus();
        returnfalse;
    }
}

functionemailValidator(elem,helperMsg)
```

WEB DESIGNING LAB

OUTPUT:

Registration Form Validation

file:///D:/WT Manual Programs/validation.html

Registration Form

First Name(Minimum 6 characters)*

Last Name*

EmailAddress*
(one e-mail id only): e.g. smith@hotmail.com

Password(minimum 6 characters)*

Address*

Mobile No*

Gender: ☐ male ☐ female

can not be null

Registration Form Validation

file:///D:/WT Manual Programs/validation.html

Registration Form

First Name(Minimum 6 characters)* 78787

Last Name*

EmailAddress*
(one e-mail id only): e.g. smith@hotmail.com

Password(minimum 6 characters)*

Address*

Mobile No*

Gender: ☐ male ☐ female

Please enter only letters for your Firstname

Registration Form Validation

file:///D:/WT Manual Programs/validation.html

Registration Form

First Name(Minimum 6 characters)* fds

Last Name*

EmailAddress*
(one e-mail id only): e.g. smith@hotmail.com

Password(minimum 6 characters)*

Address*

Mobile No*

Gender: ☐ male ☐ female

Please enter minimum 6 characters

Registration Form Validation

file:///D:/WT Manual Programs/validation.html

Registration Form

First Name(Minimum 6 characters)* mrcctsc

Last Name*

EmailAddress*
(one e-mail id only): e.g. smith@hotmail.com

Password(minimum 6 characters)*

Address*

Mobile No*

Gender: ☐ male ☐ female

Please enter only letters for your Lastname

WEB DESIGNING LAB

Registration Form Validation x +

file:///D:/WT Manual Programs/validation.html

Search

Registration Form

First Name(Minimum 6 characters)* mrcetcse

Last Name* thirdyear

EmailAddress* mrcetcse@gmail.com
(one e-mail id only): e.g. smith@hotmail.com

Password(minimum 6 characters)*

Address*

Mobile No*

Gender: ☐ male ☐ female

Please enter a valid email address

Registration Form Validation x +

file:///D:/WT Manual Programs/validation.html

Search

Registration Form

First Name(Minimum 6 characters)* mrcetcse

Last Name* thirdyear

EmailAddress* mrcetcse@gmail.com
(one e-mail id only): e.g. smith@hotmail.com

Password(minimum 6 characters)*

Address*

Mobile No*

Gender: ☐ male ☐ female

Please enter a valid email address

Registration Form Validation x +

file:///D:/WT Manual Programs/validation.html

Search

Registration Form

First Name(Minimum 6 characters)* mrcetcse

Last Name* thirdyear

EmailAddress* mrcetcse@gmail.com
(one e-mail id only): e.g. smith@hotmail.com

Password(minimum 6 characters)*

Address*

Mobile No*

Gender: ☐ male ☐ female

Please enter minimum 6 characters

☐ Prevent this page from creating additional dialogs

Registration Form Validation x +

file:///D:/WT Manual Programs/validation.html

Search

Registration Form

First Name(Minimum 6 characters)* mrcetcse

Last Name* thirdyear

EmailAddress* mrcetcse@gmail.com
(one e-mail id only): e.g. smith@hotmail.com

Password(minimum 6 characters)*

Address*

Mobile No*

Gender: ☐ male ☐ female

please enter the address

WEB DESIGNING LAB

Registration Form Validation

file:///D:/WT Manual Programs/validation.html

Registration Form

First Name(Minimum 6 characters)* mrcetcse

Last Name* thirdyear

EmailAddress* mrcetcse@gmail.com
(one e-mail id only): e.g. smith@hotmail.com

Password(minimum 6 characters)*

Address* Kompally Hyderabad

Mobile No* bhghgh

Gender: ☐ male ☐ female

Please enter a valid mobilen0

Registration Form Validation

file:///D:/WT Manual Programs/validation.html

Registration Form

First Name(Minimum 6 characters)* mrcetcse

Last Name* thirdyear

EmailAddress* mrcetcse@gmail.com
(one e-mail id only): e.g. smith@hotmail.com

Password(minimum 6 characters)*

Address* Kompally Hyderabad

Mobile No* 123456

Gender: ☐ male ☐ female

Please enter 10 numbers only

Registration Form Validation

file:///D:/WT Manual Programs/validation.html

Registration Form

First Name(Minimum 6 characters)* mrcetcse

Last Name* thirdyear

EmailAddress* mrcetcse@gmail.com
(one e-mail id only): e.g. smith@hotmail.com

Password(minimum 6 characters)*

Address* Kompally Hyderabad

Mobile No* 1234567890

Gender: ☒ male ☐ female

HTML Color Names

order conformation

file:///D:/WT%20Manual%20Programs/success.html?gender=on

Successfully Registered....

WEB DESIGNING LAB

WEEK-3: Develop and demonstrate the usage of inline, internal and external style sheet using CSS.

Aim: Design a webpage using CSS which includes the following:

- 1) Use different font styles
- 2) Control the repetition of image with background-repeat and no-repeat property
- 3) Define style for links as a:link, a:active, a:hover, a:visited
- 4) Add customized cursors for links.

PROGRAM:

style.css

```
p.left
{
text-align:left;
color:blue;
font-family:Cambria;
font-size:large;
text-indent:20px;
}
p.center
{
text-align:center;
text-decoration:underline;
text-transform:uppercase;
letter-spacing:-3px;
word-spacing:20px;
font-size:larger;
}
p.right
{
text-align:right;
color:red;
font-family:Tahoma;
font-size:15pt;
text-decoration:overline;
font-style:italic;
}
b#headline
{
color:orange;
font-size:22px;
font-family:arial;
text-decoration:underline;
}
```

WEB DESIGNING LAB

sample.html

```
<html>
<head>
  <styletype="text/css">
    body
    {
      background-image:url('images/cse.png');
      background-repeat:no-repeat;
      background-position:center center;
      background-attachment:fixed;
      background-color:pink;
    }
    a:link { text-decoration:none;color:orange; }
    a:visited { text-decoration:none;color:red; }
    a:hover { text-decoration:underline;color:blue; }
    a:active{text-decoration:underline;color:purple;}
    h3 { color:green; }
    .c1 { cursor:crosshair}
    .c2 { cursor:pointer}
    .c3 { cursor:move}
    .c4 { cursor:text}
    .c5 { cursor:wait}
    .c6 { cursor:help}
  </style>
  <linkrel="stylesheet"type="text/css"href="style.css">
</head>
<bodybgcolor="cyan">

  <h1style="color:blue;text-align:center;">CSS(Inline,InternalandExternal)</h1>

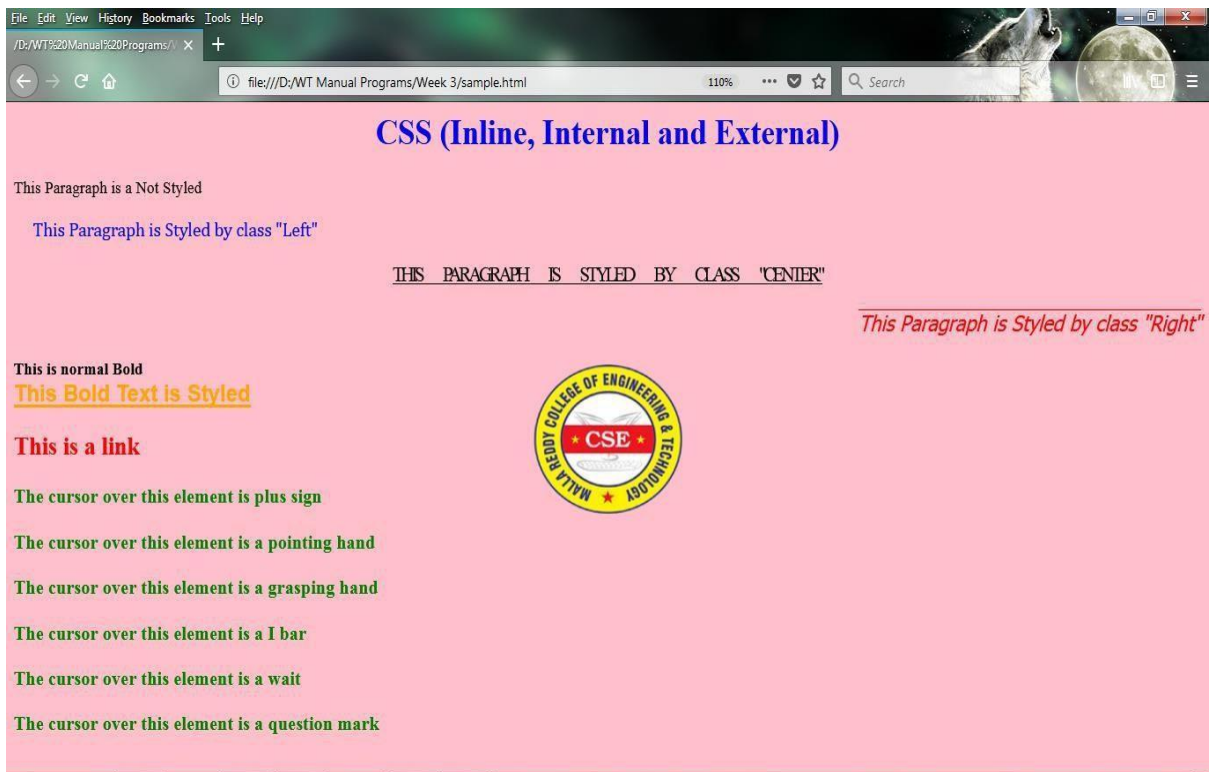
  <p>ThisParagraph isaNotStyled</p>
  <pclass="left">ThisParagraphisStyledbyclass"Left"</p>
  <pclass="center">ThisParagraphisStyledbyclass"Center"</p>
  <pclass="right">This ParagraphisStyledbyclass"Right"</p>
  <b>ThisisnormalBold</b><br>
  <bid="headline">ThisBoldTextisStyled</b>

  <h2><b><a href="">Thisisa link</a></b></h2>

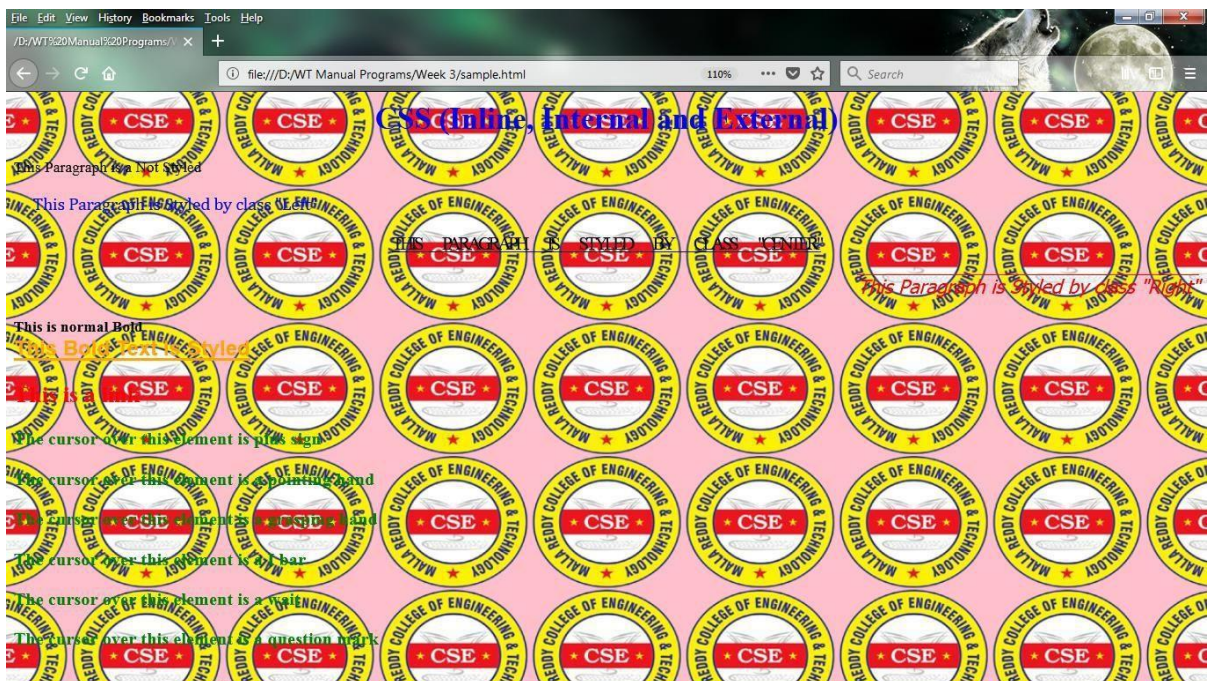
  <h3class="c1">The cursorover thiselementisplussign</h3>
  <h3class="c2">The cursorover thiselementisapointinghand</h3>
  <h3class="c3">Thecursoroverthiselement isagraspinghand</h3>
  <h3class="c4">The cursorover thiselementisaIbar</h3>
  <h3class="c5">The cursoroverthiselementisa wait</h3>
  <h3class="c6">The cursoroverthiselementisaquestionmark</h3>
</html>
```

WEB DESIGNING LAB

OUTPUT 1:



OUTPUT2:background-repeat: repeat;



EXERCISE:

1. Create a rich graphical web page using CSS (ID selector & Class Selectors).

WEB DESIGNING LAB

WEEK - 4: Develop and demonstrate JavaScript with POP-UP boxes and functions for the following problems:

- a) Input: Click on Display Date button using onclick() function
Output: Display **date** in the textbox
 - b) Input: A number obtained using **prompt**
Output: **Factorial** of n number using **alert**
 - c) Input: A number obtained using **prompt**
Output: A **multiplication table** of numbers from 1 to 10 of n using **alert**
 - d) Input: A number obtained using **prompt** and add another number using **confirm**
Output: **Sum** of the entire numbers using **alert**
- PROGRAM:**

a) date.html

```
<html>
<body>
  <script>
    function display(){
      var x="You have clicked";
      var d=new Date();
      var date=d.getDate();
      var month=d.getMonth();
      month++;
      var year=d.getFullYear();
      document.getElementById("dis").value=date+"/"+month+"/"+year;
    }
  </script>
</body>
</html>
```

OUTPUT:



26/11/2017

Display Date

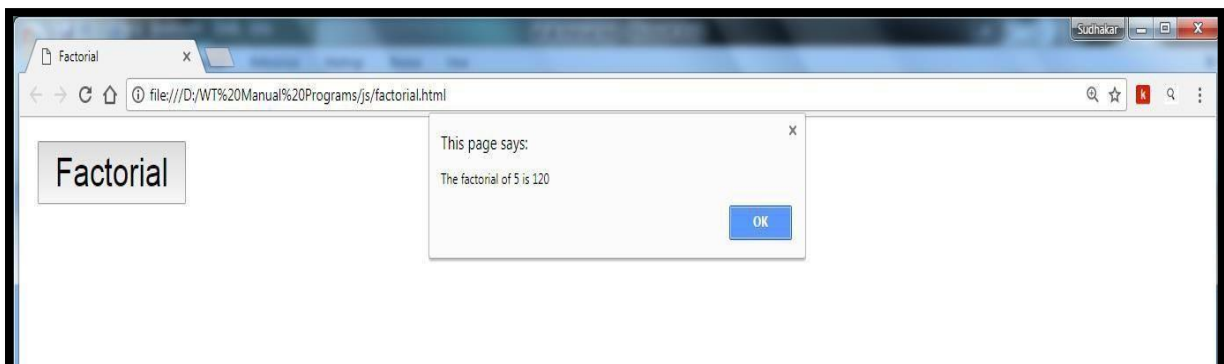
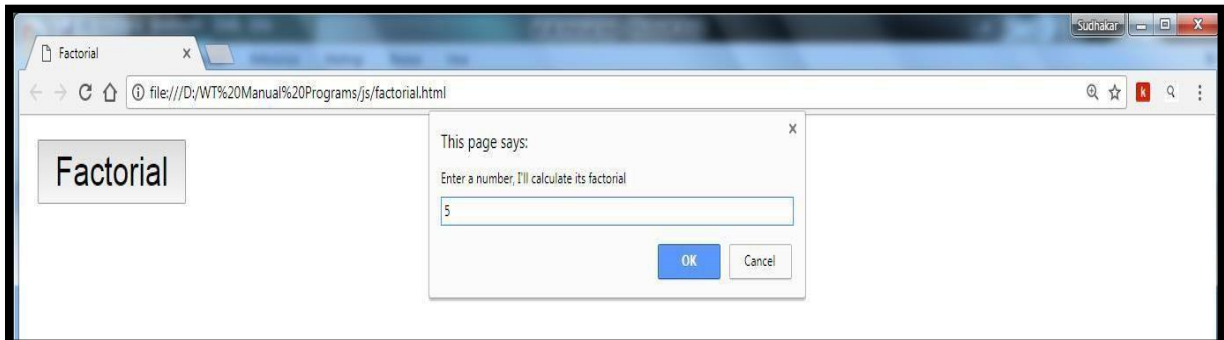
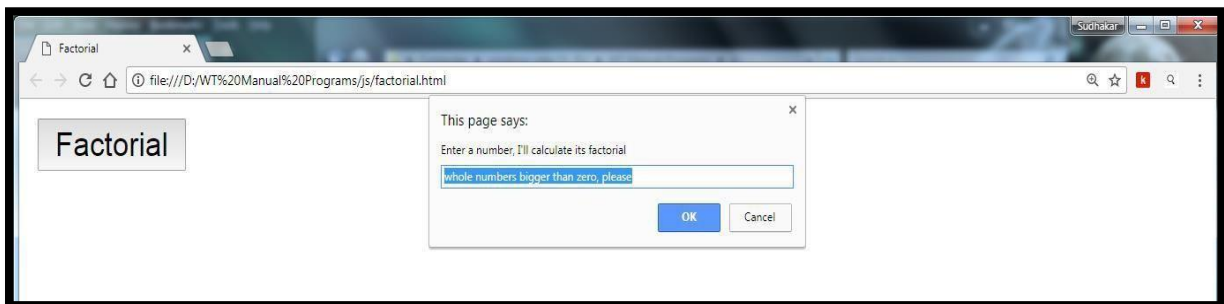
b) factorial.html

```
<html>
<head>
  <title>factorial</title>
  <script language='javascript'>
```


WEB DESIGNING LAB

```
functionfactorialcalc()
{
    number=parseInt(prompt("enteranumber,i'llcalculateitsfactorial","whole numbers
        bigger than zero, please"))
    factorial=1
    for(i=1;i<=number;i++)
    {
        factorial=factorial*i
    }
    alert("thefactorialof "+ number+"is"+factorial)
}
</script>
</head>
<body><formname=frm>
<inputtype=buttonvalue='factorial'onclick="factorialcalc();">
</form>
</body>
</html>
```

OUTPUT:

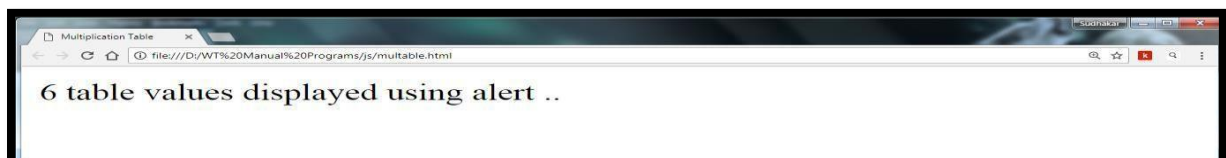
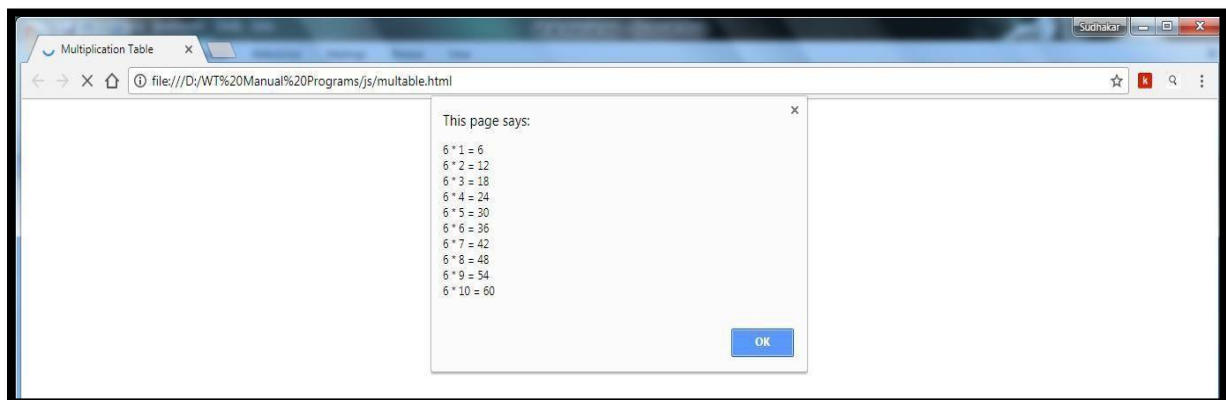
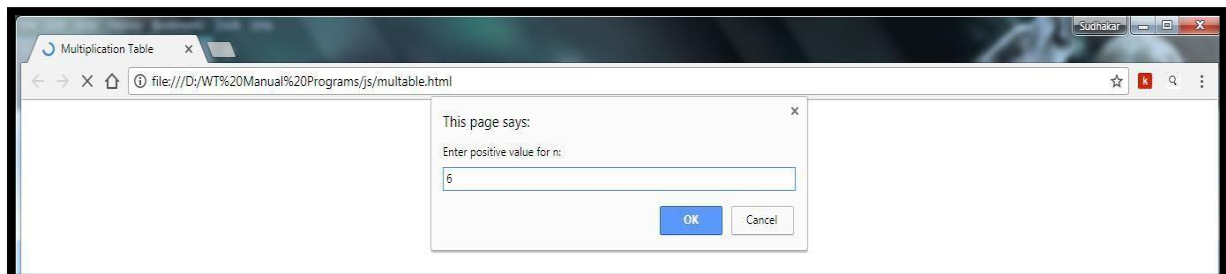


WEB DESIGNING LAB

c) multable.html

```
<html>
  <head><title>MultiplicationTable</title></head>
  <body>
    <scripttype="text/javascript">
      <!--
        varn=prompt("Enterpositivevalueform:", "");
        if(!isNaN(n)) {
          var table="";
          varnumber="";
          for(i=1;i<=10;i++){
            number=n * i;
            table+=n+"*" +i +"="+number+"\n";
          }
          alert(table);
        }
        else{
          alert("Enter positive value");
          n=prompt("Enterpositivevalueform:", "");
        }
        document.write(n+"tablevaluesdisplayed usingalert..<br/>");
      <!-->
    </script>
  </body>
</html>
```

OUTPUT:

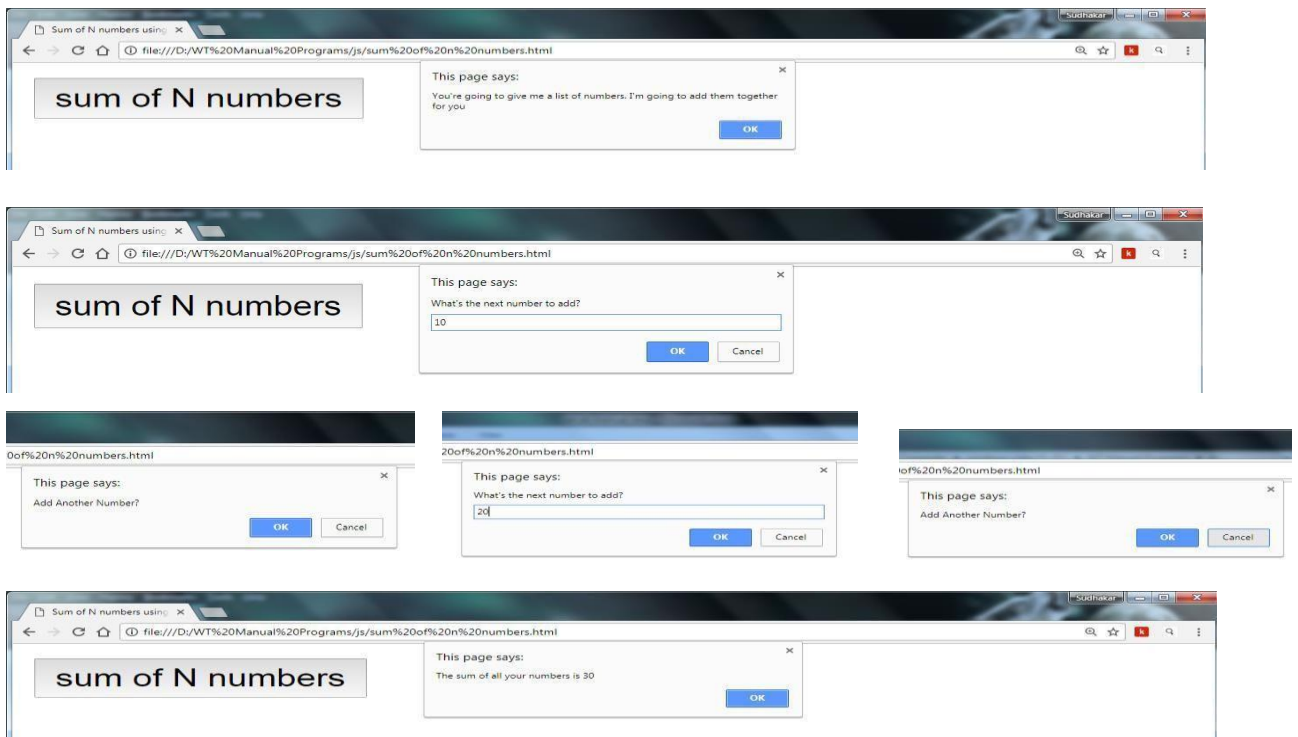


WEB DESIGNING LAB

d) sumofn numbers.html

```
<html>
  <head><title>sumofnnumbersusingpopupboxes</title>
  <scriptlanguage='javascript'>
    function addsum()
    {
      alert("you'regoingtogivemealistofnumbers.i'mgoingtoaddthemtogetherforyou"); var
        keeping = true
        var sumofnums = 0
        while(keeping){
          sumofnums=sumofnums+parseInt(prompt("what'sthenextnumbertToAdd?",""))
          keeping = confirm("add another number?")
        }
      alert("thesumofallyour numbersis"+ sumofnums)
    }
  </script>
</head>
<body>
  <formname=frm>
    <inputtype=buttonvalue='sumofnnumbers'onclick="addsum();">
  </form>
</body>
</html>
```

OUTPUT:



EXERCISE:

1. Write a JavaScript program to find out the Fibonacci Series.
2. Write a JavaScript program to check the given number is a palindrome or not.

WEB DESIGNING LAB

WEEK-5:

Write an HTML page that contains a selection box with a list of 5 countries. When the user selects a country, its capital should be printed next in the list. Add CSS to customize the properties of the font of the capital (color, bold and font size).

```
<html>
<head>
  <title>WTLabmanualprogramno.3</title>
</head>
<style>
  h1
  {
    color: red;
    text-align:center;
  }
  .textbox1
  {
    color: blue;
    font-size:30px;
    font-weight:bold;
  }
</style>
<body>
<center>
  <h1>Selectthecountrynametofinditscapital</h1>
  <formname="myform">
    SelectCountry<selectname="country" id="sbox1"onClick="myFunction()"required>
      <optionvalue=""></option>
      <optionvalue="NEWDELHI">INDIA</option>
      <optionvalue="CANBERRA">AUSTRALIA</option>
      <optionvalue="WASHINGTOND.C">AMERICA</option>
      <optionvalue="LONDON">UNITEDKINGDOM</option>
      <optionvalue="BERLIN">GERMANY</option>
    </select><br><br>
    Capital<inputtype="text" class="textbox1" id="sbox2">
  </form>
</center>
<script>
functionmyFunction()
{
  var a=document.getElementById("sbox1").value;
  document.getElementById("sbox2").value=a;
}
</script>    </body>    </html>
```

OUTPUT:



Select the country name to find its capital

Select Country INDIA

Capital **NEW DELHI**

WEB DESIGNING LAB

Week-6:

Write an HTML page including any required JavaScript that takes a number from text field in the range of 0 to 999 and shows it in words. It should not accept four and above digits, alphabets and special characters.

AIM: To convert number to words using JavaScript

PROGRAM:

0-999.html

```
<html>
<head>
  <title>HTML-Convert number to words using JavaScript</title>
  <SCRIPT language=Javascript>
    <!--
    function isNumberKey(evt)
    {
      var charCode=(evt.which)?evt.which:evt.keyCode; if
      (charCode != 46 && charCode > 31
      &&(charCode<48||charCode>57))
        return false;
      return true;
    }
    //-->
  </SCRIPT>
<script>
function NumToWord(inputNumber,outputControl)
{
  var str=new String(inputNumber)
  var splt = str.split("");
  var rev =splt.reverse();
  var once=['Zero', 'One', 'Two', 'Three', 'Four', 'Five', 'Six', 'Seven', 'Eight', 'Nine'];
  var two=['Ten', 'Eleven', 'Twelve', 'Thirteen', 'Fourteen', 'Fifteen', 'Sixteen', 'Seventeen', '
Eighteen', ' Nineteen'];
  var tens=['', 'Ten', 'Twenty', 'Thirty', 'Forty', 'Fifty', 'Sixty', 'Seventy', 'Eighty', 'Ninety'];
  numLength=rev.length;
  var word= new Array();
  var j = 0;
  for(i=0;i<numLength;i++)
  {switch(i){
    case 0:
      if((rev[i]==0)|| (rev[i+1]==1))
        {word[j]="";
        }
      else{
        word[j]=once[rev[i]];
      }
      word[j]=word[j];
      break;
    case 1:
      aboveTens();
  }
```

WEB DESIGNING LAB

```
        break;
    case 2:
        if(rev[i]==0){
            word[j]="";
        }
        elseif((rev[i-1]== 0) ||(rev[i-2]==0))
            {word[j]=once[rev[i]]+"Hundred";
        }
        else{
            word[j]=once[rev[i]]+"Hundredand";
        }
        break;
    default:break;
    }
    j++;
}
functionaboveTens(){
    if(rev[i]==0){word[j]=""; }
    elseif(rev[i]==1){word[j]=twos[rev[i-1]]; } else {
        word[j] = tens[rev[i]]; }
    }
word.reverse();
varfinalOutput="";
for(i=0;i < numLength; i++){
    {finalOutput=finalOutput+word[i];
    }
    document.getElementById(outputControl).innerHTML=finalOutput;
}
</script>
</head>
<body>
    <h1>HTML-ConvertnumberstowordsusingJavaScript</h1>
    <input id="Text1" type="text" onkeypress="return isNumberKey(event)"
onkeyup="NumToWord(this.value,'divDisplayWords');"maxlength="3"style="background-
color: #efefef; border: 2px solid #CCCCC; font-size: large" />
    <br/>    <br />
    <div id="divDisplayWords"style="font-size:30;color:Teal;font-family: Arial;">
    </div>
</body>
</html>
```

OUTPUT:



HTML - Convert numbers to words using JavaScript

567

Five Hundred and Sixty Seven

WEB DESIGNING LAB

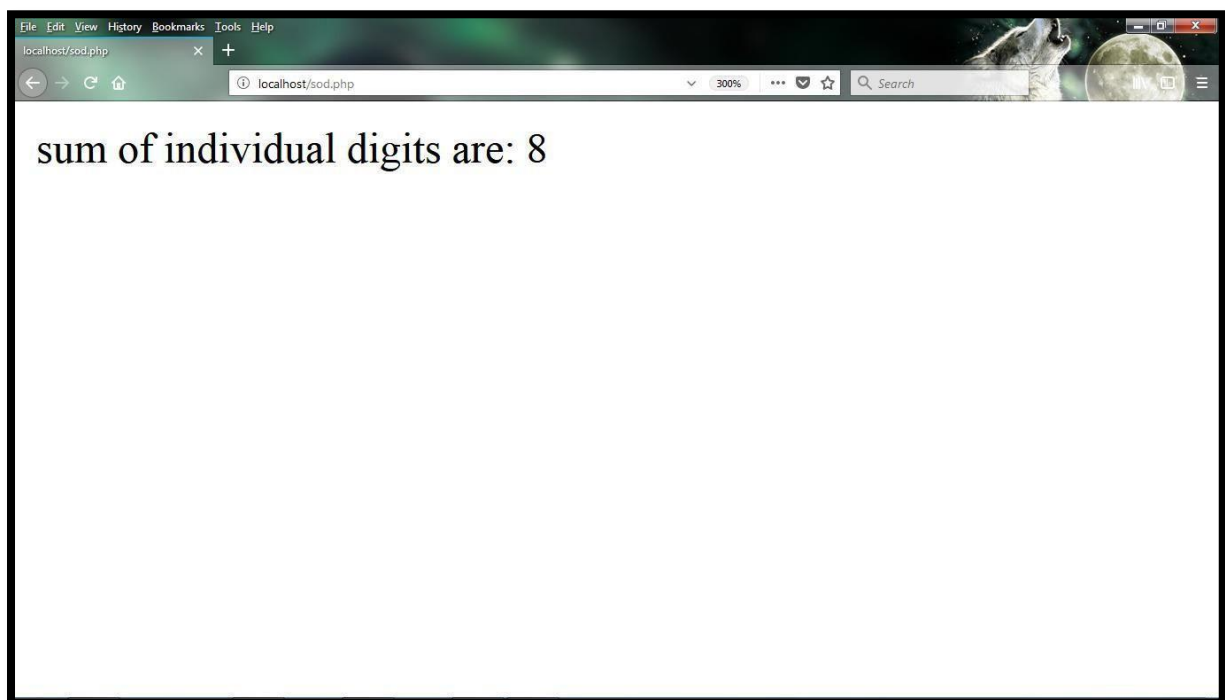
WEEK-7: Develop and demonstrate PHP Script for the following problems:

- a) Write a PHP Script to find out the Sum of the Individual Digits.
- b) Write a PHP Script to check whether the given number is Palindrome or not

a) Find out Sum of the individual Digits

```
<?php
$n=323;
$sum=0;
while($n>0)
{
    $r=$n%10;
    $sum+=$r;
    $n=$n/10;
}
echo "sum of individual digits are:$sum";
?>
```

Output:



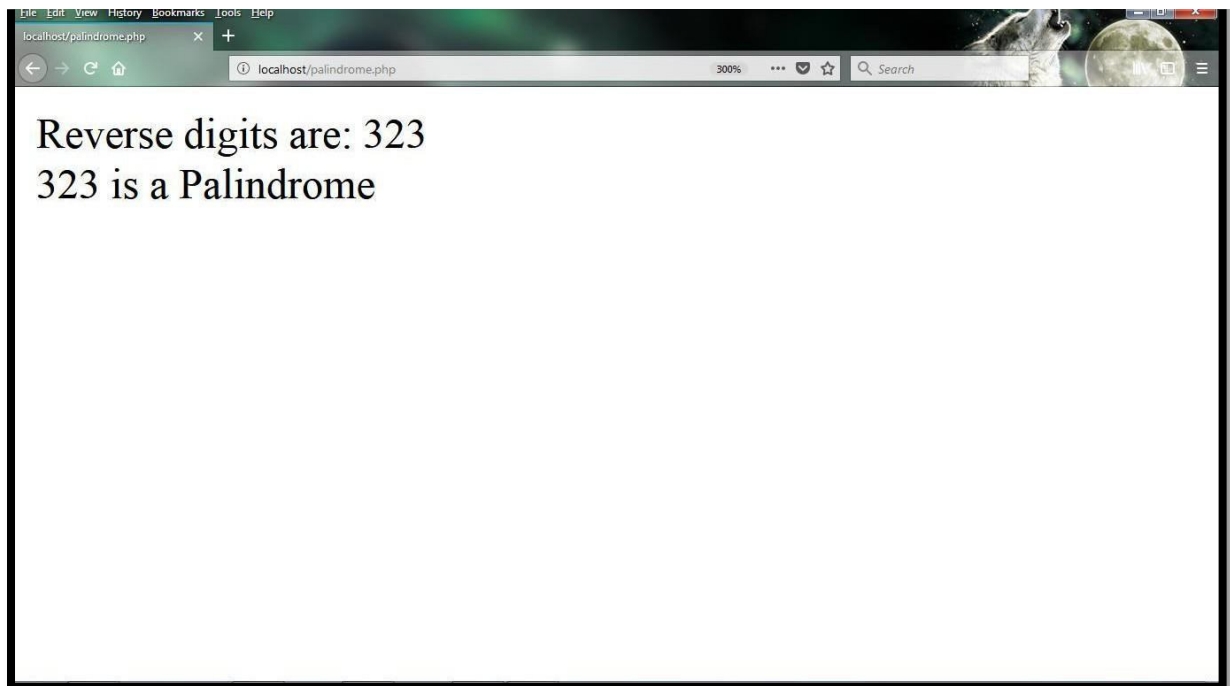
WEB DESIGNING LAB

b) Check whether the given number is Palindrome or not

```
<?php
$n=323;
$t=$n;
$rev=0;
while($n>0)
{
    $r=$n%10;
    $rev=$rev*10+$r;
    $n=(int)($n/10);
}
echo "Reversed digits are:$rev<br>";

if($t==$rev)
echo "$rev is a Palindrome"; else
echo "$rev is not a Palindrome";
?>
```

Output:



EXERCISE:

1. Write a PHP Script to find the factorial of a given number.
2. Write a PHP Script to find the Fibonacci series of a given number.

WEB DESIGNING LAB

Week-8:

Create an XML document that contains 10 users information. Write a Java Program, which takes UserId as input and returns the user details by taking the user information from XML document using DOM parser or SAX parser.

AIM: Takes UserId as input and returns the user details using XML with DOM

PROGRAM:

users.xml

```
<usersinformation>
  <user>
    <rollno>501</rollno>
    <name>aaa</name>
    <branch>cse</branch>
    <college>mrcet</college>
  </user>
  <user>
    <rollno>502</rollno>
    <name>bbb</name>
    <branch>cse</branch>
    <college>mrcet</college>
  </user>
  <user>
    <rollno>503</rollno>
    <name>ccc</name>
    <branch>cse</branch>
    <college>mrcet</college>
  </user>
  <user>
    <rollno>504</rollno>
    <name>ddd</name>
    <branch>cse</branch>
    <college>mrcet</college>
  </user>
  <user>
    <rollno>505</rollno>
    <name>eee</name>
    <branch>cse</branch>
    <college>mrcet</college>
  </user>
  <user>
    <rollno>506</rollno>
    <name>fff</name>
    <branch>cse</branch>
    <college>mrcet</college>
  </user>
  <user>
    <rollno>507</rollno>
    <name>ggg</name>
    <branch>cse</branch>
```

WEB DESIGNING LAB

```
        <college>mrcet</college>
    </user>
    <user>
        <rollno>508</rollno>
        <name>hhh</name>
        <branch>cse</branch>
        <college>mrcet</college>
    </user>
    <user>
        <rollno>509</rollno>
        <name>iii</name>
        <branch>cse</branch>
        <college>mrcet</college>
    </user>
    <user>
        <rollno>510</rollno>
        <name>jjj</name>
        <branch>cse</branch>
        <college>mrcet</college>
    </user>
</usersinformation>
```

UserDom.java

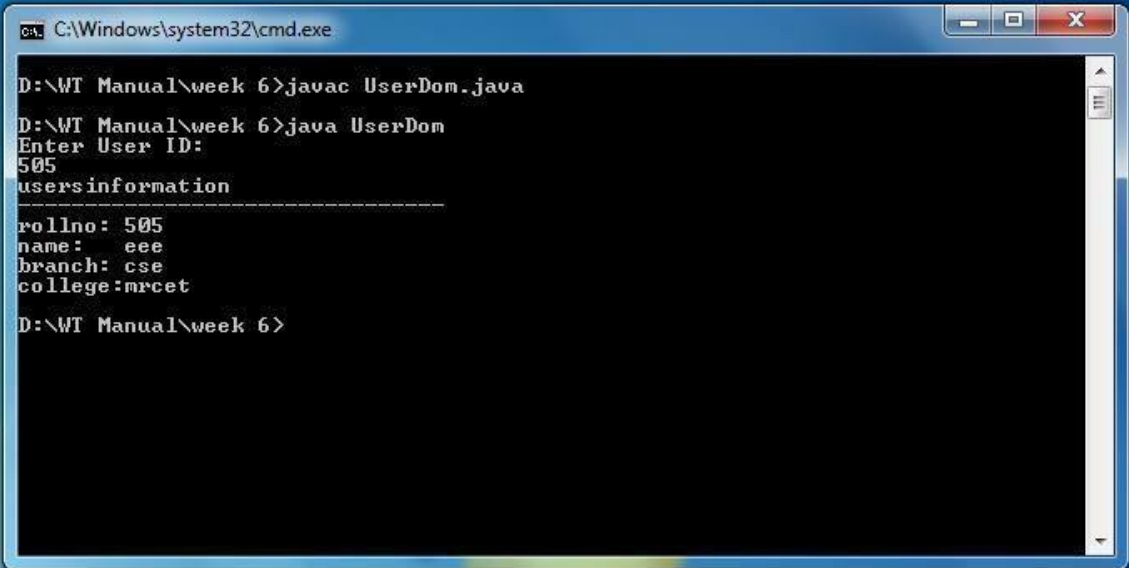
```
import java.io.File;
import javax.xml.parsers.*;
import org.w3c.dom.*;
import java.util.Scanner;
public class UserDom
{
    public static void main(String args[]) throws Exception
    {
        DocumentBuilderFactory fac = DocumentBuilderFactory.newInstance();
        DocumentBuilder b = fac.newDocumentBuilder();
        Document doc = b.parse(new File("users.xml"));
        doc.getDocumentElement().normalize();
        Element root = doc.getDocumentElement();
        Scanner in = new Scanner(System.in);
        System.out.println("Enter User ID:");
        int n = in.nextInt();
        int flag = 0;
        NodeList nl = doc.getElementsByTagName("user");
        for (int i = 0; i < nl.getLength(); i++)
        {
            Node node = nl.item(i);
            if (node.getNodeType() == Node.ELEMENT_NODE)
            {
                Element e = (Element) node;
                int
                x = Integer.parseInt(e.getElementsByTagName("rollno").item(0).getTextContent());
                if (x == n)
                {

```

WEB DESIGNING LAB

```
System.out.println(root.getNodeName());
System.out.println(".....");
System.out.println("rollno:\t"+e.getElementsByTagName("rollno").item(0).getTextContent());
System.out.println("name:\t"+e.getElementsByTagName("name").item(0).getTextContent());
System.out.println("branch:\t"+e.getElementsByTagName("branch").item(0).getTextContent());
System.out.println("college:"+e.getElementsByTagName("college").item(0).getTextContent());
flag=1;
break;
}
else
{
flag=0;
}
}
}
if(flag==0)
System.out.println("User not available");
}
}
```

OUTPUT:



```
C:\Windows\system32\cmd.exe

D:\WT Manual\week 6>javac UserDom.java
D:\WT Manual\week 6>java UserDom
Enter User ID:
505
users information
-----
rollno: 505
name: eee
branch: cse
college: mrcet
D:\WT Manual\week 6>
```

EXERCISE:

1. Write a XML program to validate student details (Rno, Name, college & branch) using DTD and Schemas.
 2. Write a XML program to validate book details (Title of the book, Author Name, ISBN no & Publication) using DTD and Schemas.
-

WEB DESIGNING LAB

WEEK-9:

Implement the following web applications using (a) PHP, (b) Servlets and (c) JSP.

9(i)(a). A web application that takes a name as input and on submit it shows a hello

<name> page where name is taken from the request. It shows the start time at the right top corner of the page and provides a logout button. On clicking this button, it should show a logout page with Thank You <name> message with the duration of usage (hint: Use session to store name and time).

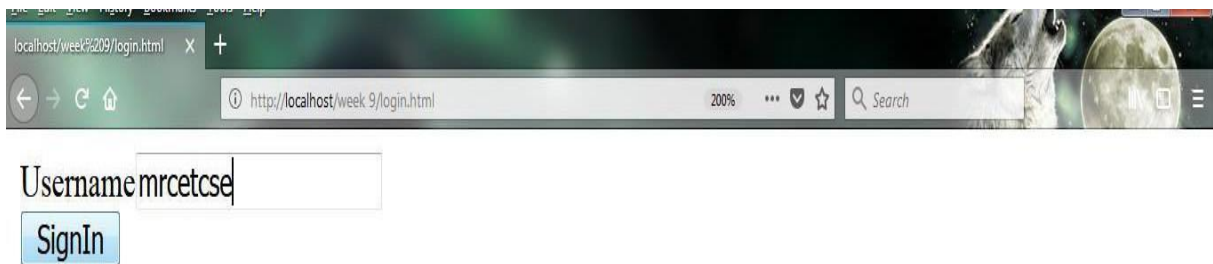
AIM: To design an application that uses session to store data.

PROGRAM:

login.html

```
<html>
<form action="home.php" method="post">
Username<input type="text" name="text1"><br>
<input type="submit" value="SignIn" name="submit">
</form>
</html>
```

Output of login.html:

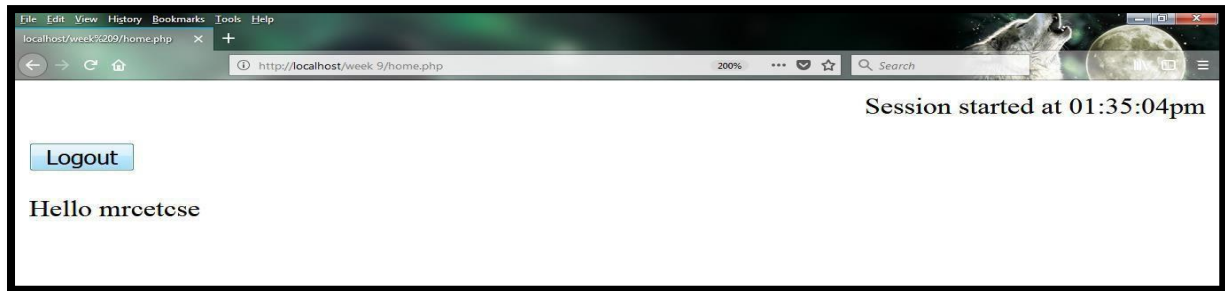


Home.php:

```
<?php
session_start();
date_default_timezone_set("Asia/Calcutta");
$_SESSION['luser']=$_POST['text1'];
$_SESSION['start']=time();
$tm=$_SESSION['start'];
print"<align='right'>Session started at".date("h:i:sa",$tm)."<br>"; print
"<form action='logoutpage.php' method='post'>";
print"<input type='submit' value='Logout'></p>";
print "</form>";
print"Hello".$_SESSION['luser'];
?>
```

WEB DESIGNING LAB

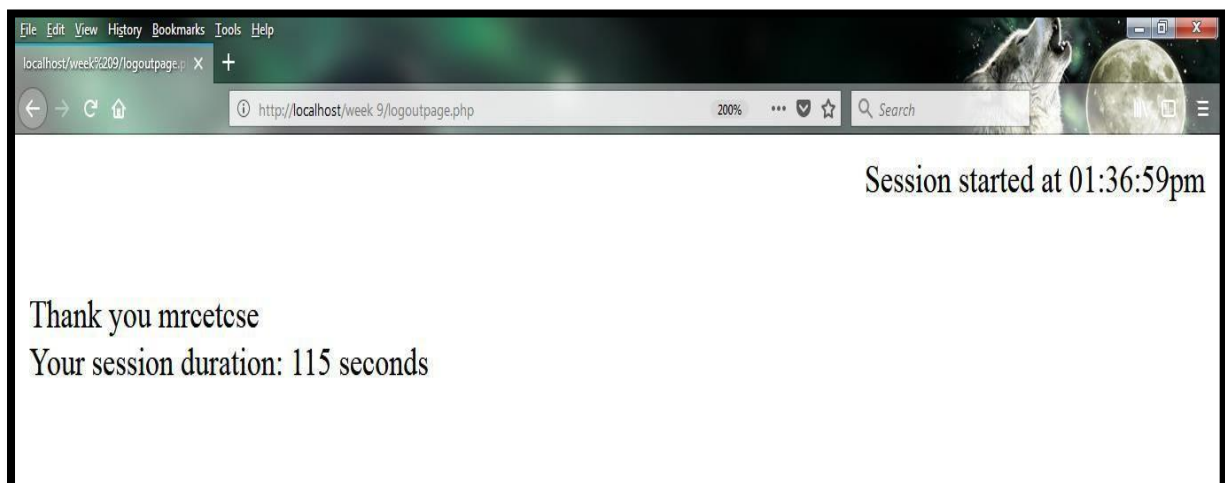
Outputofhome.php:



Logoutpage.php:

```
<?php
    session_start();
    date_default_timezone_set("Asia/Calcutta");
    print"<align='right'>Sessionstartedat".date("h:i:sa",time())."</p><br>"; print
    "Thank you " . $_SESSION['luser'];
    $sessiontime=time()-$_SESSION['start'];
    print"<br>Yoursessionduration:". $sessiontime."seconds";
    session_destroy();
?>
```

OutputofLogoutpage.php:



WEB DESIGNING LAB

9(ii)(a). Write a PHP Program to display current Date, Time and Day using PHP Script.

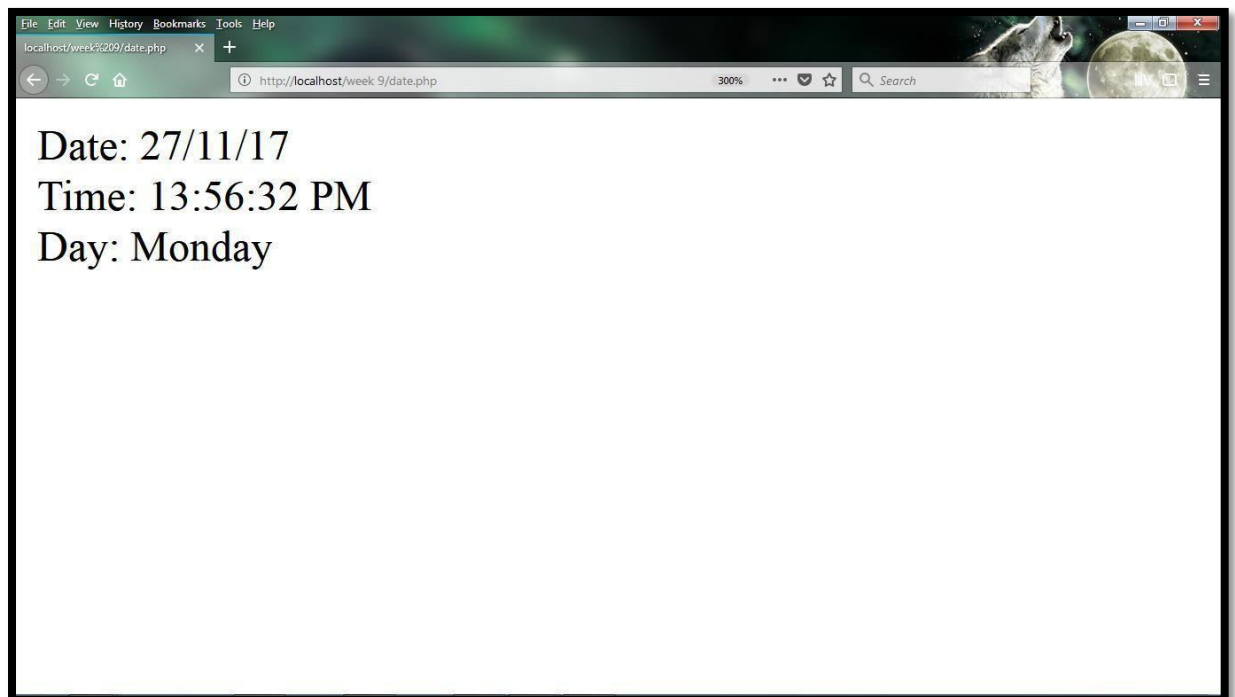
AIM: To display current date, Time and Day using PHP.

PROGRAM:

date.php

```
<?php
    date_default_timezone_set("Asia/Calcutta");
    echo "Date: ";
    echo date("d/m/y");
    echo "<br>Time:";
    echo date("H:i:sA",time()); echo
    "<br> Day: ";
    $day=date("l");
    echo $day;
?>
```

Output:



WEB DESIGNING LAB

9 (iii) (a). A web application that takes name and age from an HTML page. If the age is less than 18, it should send a page with “Hello <name>, you are not authorized to visit the site” message, where <name> should be replaced with the entered name. Otherwise it should send “Welcome <name> to this site” message.

AIM: To design an application to validate age are less than 18 or more than 18 using PHP.

PROGRAM:

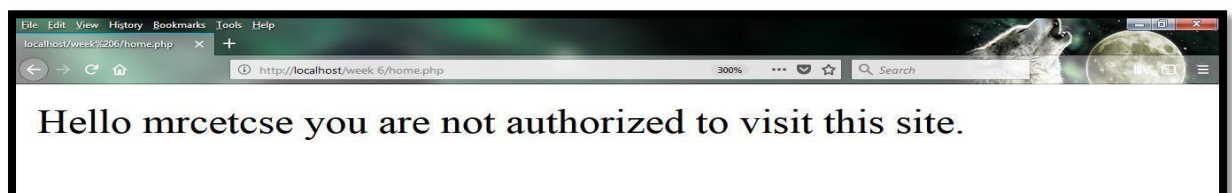
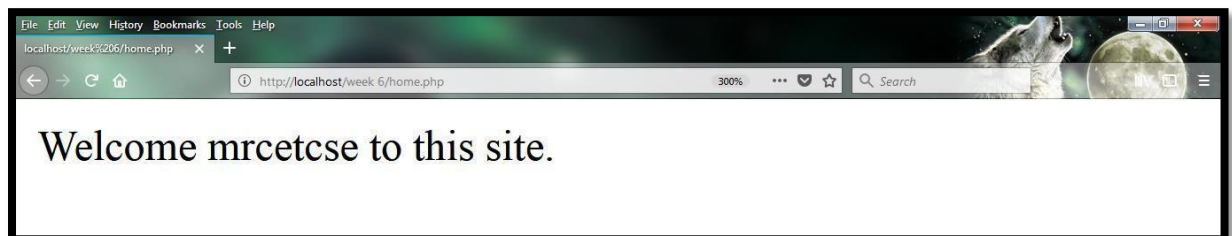
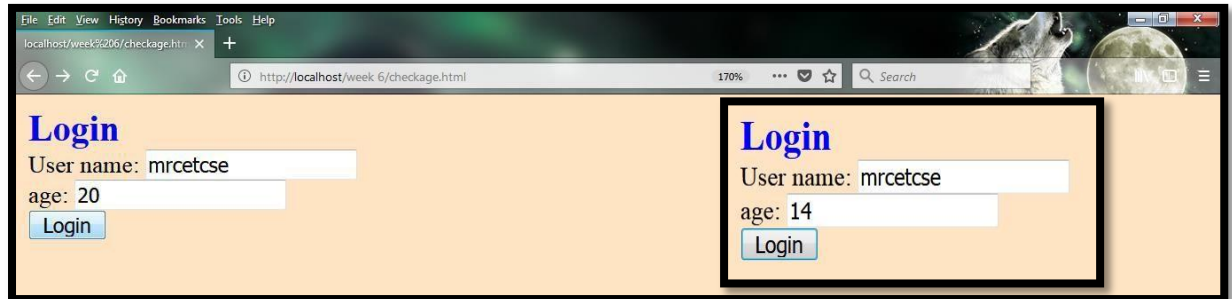
checkage.html

```
<html>
<body bgcolor="bisque">
  <form action='home.php' method='post'>
    <center><b><fontcolor="blue" size="10">Login</font></b></center><br><br>
    User name: <input type='text' name='name'><br>
    age:<input type='text' name='age'><br>
    <input type='submit' value='Login'>
  </form>
</body>
</html>
```

home.php

```
<?php
$name=$_POST['name'];
$age=$_POST['age'];
if ($age < 18)
    print"Hello ".$name."you are not authorized to visit this site."; else
    print"Welcome " . $name."to this site."
?>
```

Output:



WEB DESIGNING LAB

9 (iv) (a). A web application that lists all cookies stored in the browser on clicking “List Cookies” button. Add cookies if necessary.

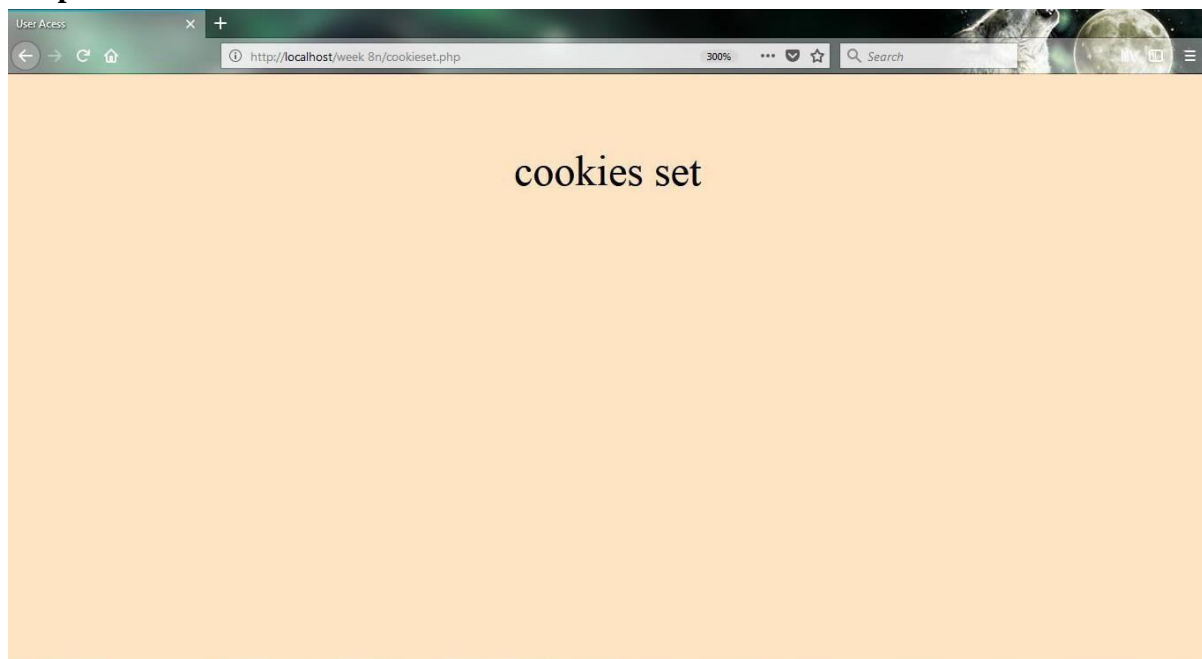
AIM: To design an application to develop cookies using PHP.

PROGRAM:

cookieset.php

```
<html>
<head><title>User Access </title></head>
<body bgcolor="bisque"><br>
<center>
    <?php
        $firstname='aaa';
        $middlename='bbb';
        $lastname = 'ccc';
        setcookie('first_name',$firstname,time()+86400);
        setcookie('middle_name',$middlename,time()+86400);
        setcookie('last_name',$lastname,time()+86400);
        print "cookies set";
    ?>
</center>
</body>
</html>
```

Output:

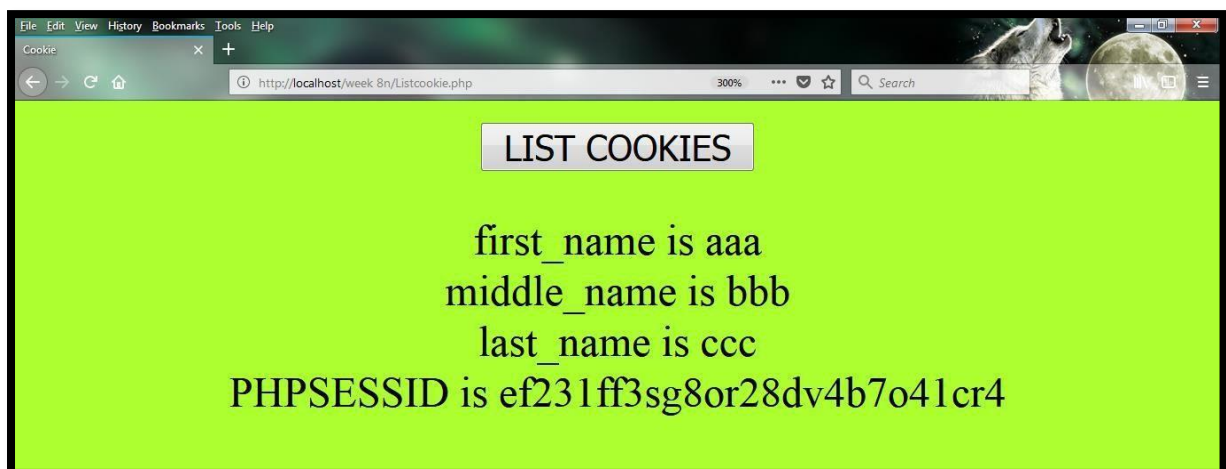
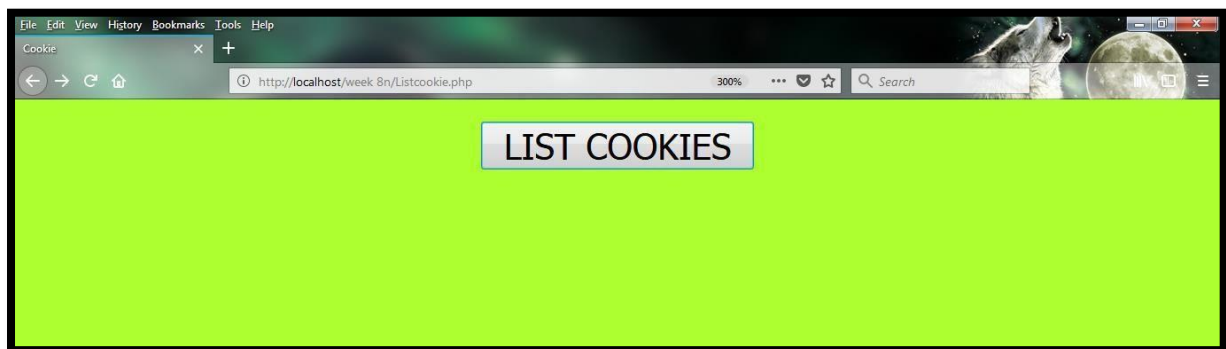


WEB DESIGNING LAB

Listcookie.php

```
<html>
<head><title>Cookie</title></head>
<bodybgcolor="GreenYellow">
<center>
<formaction=""method="post">
  <inputtype="submit"value="LISTCOOKIES"name="list">
</form>
</center>
  <?php
    error_reporting(0);
    if($_POST['list'])
    {
      foreach($_COOKIEas$key=>$val)
      {
        echo"<center>".$key."is".$val."<br>
        </center>";
      }
    }
  ?>
</body>
</html>
```

Output:



WEB DESIGNING LAB

9(i)(b). A web application that takes a name as input and on submit it shows a hello <name> page where name is taken from the request. It shows the start time at the right top corner of the page and provides a logout button. On clicking this button, it should show a logout page with Thank You <name> message with the duration of usage (hint: Use session to store name and time).

USING SERVLET

Session1.html

```
<html>
<head><title>SESSION LOGIN </title></head>
<body>
<center>
<form action="http://localhost:8080/Session1/session6vib" method="get">
Enter Name: <input type="text" name="uname"><br>
<input type="submit" value="LOGIN" name="register">
</form>
</center>
</body>
</html>
```

Session1.java

```
import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;
import java.util.*;
public class Session1 extends HttpServlet
{
    public void doGet(HttpServletRequest request, HttpServletResponse res) throws IOException, ServletException
    {
        try
        {
            res.setContentType("text/html");
            PrintWriter out = res.getWriter();
            out.println("<form method=get action=session26vib>");
            Date d = new Date();
            out.println("<p align=right> Time:" + d.getTime() + "</p>");
            String un = request.getParameter("uname");
            HttpSession session = request.getSession();
            session.setAttribute("user", un);
            session.setAttribute("time", d.getTime());
            out.println("Hello\t" + un);
            out.println("<br><br><input type=submit value=logout>");
            out.println("</form>");
        }
        catch (Exception e)
        {
            e.printStackTrace();
        }
    }
}
```

WEB DESIGNING LAB

Session2.java

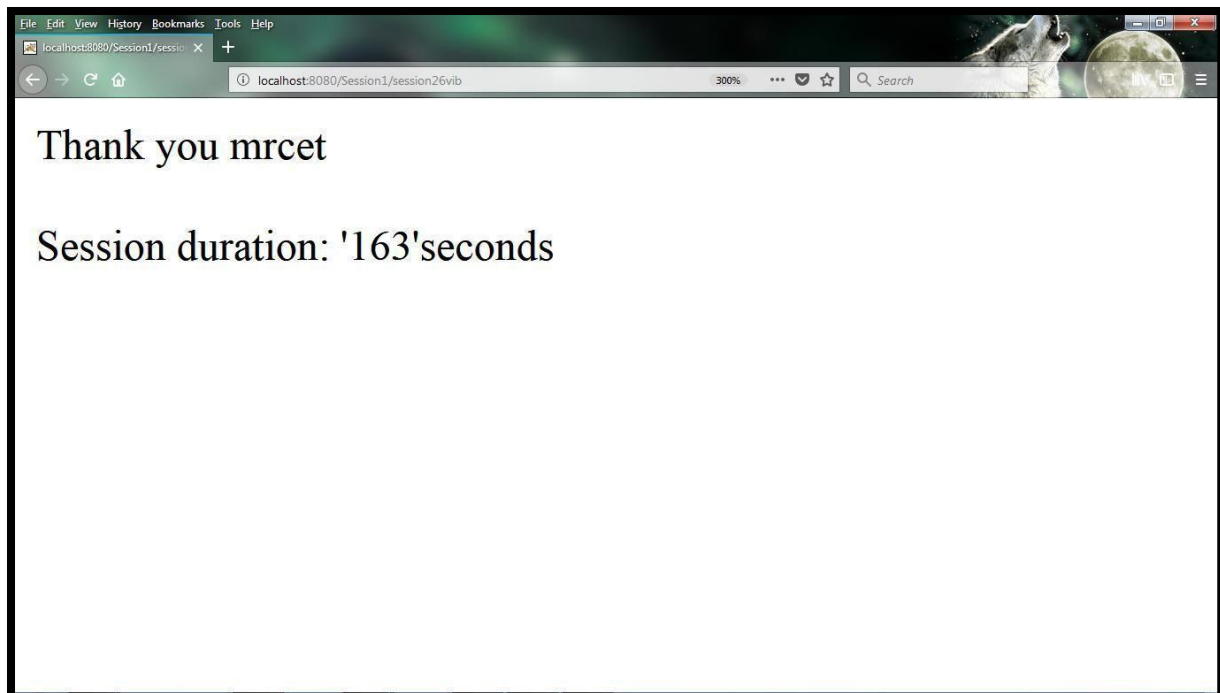
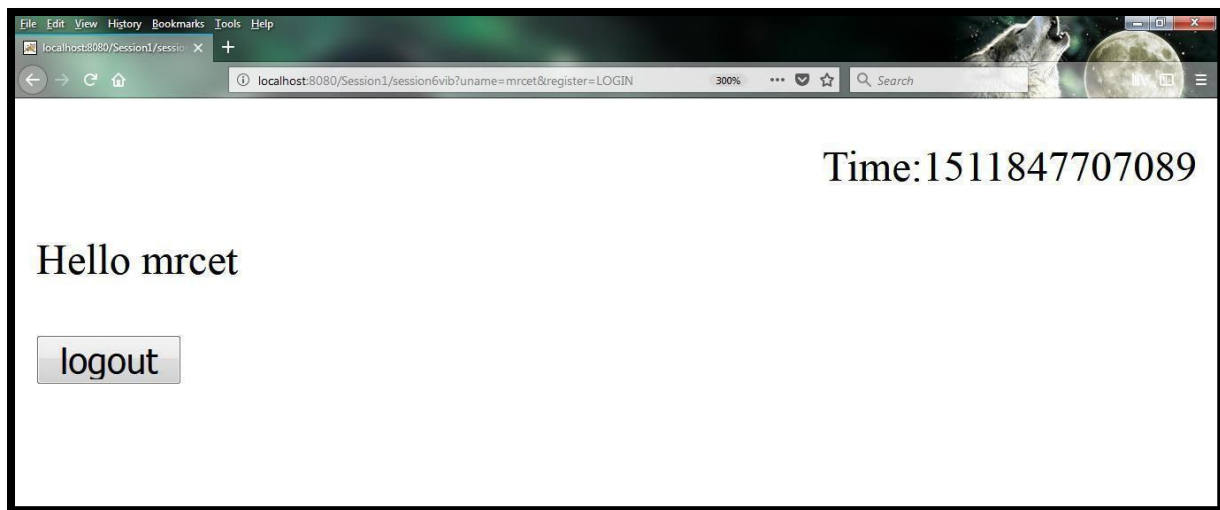
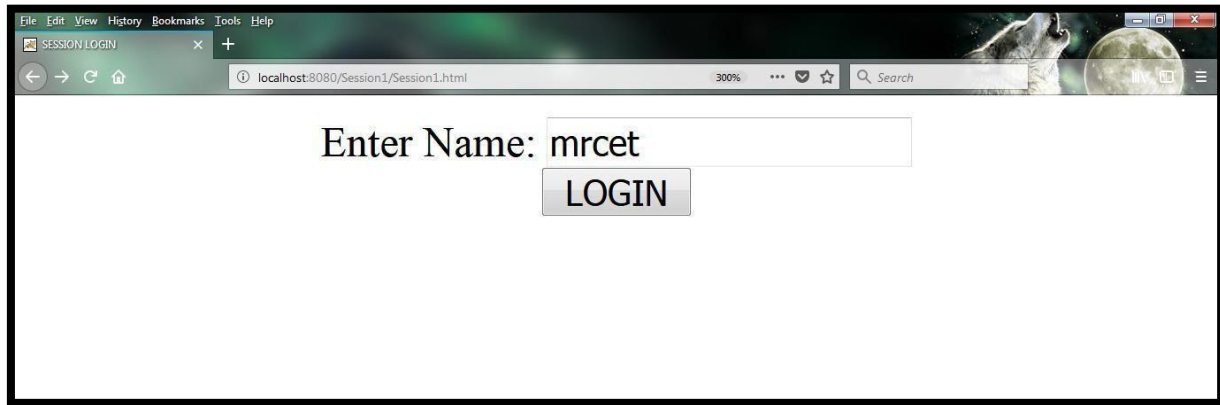
```
import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;
import java.util.*;
public class Session2 extends HttpServlet
{
    public void doGet(HttpServletRequest req, HttpServletResponse res) throws IOException,
    ServletException
    {
        try
        {
            res.setContentType("text/html");
            PrintWriter out=res.getWriter();
            HttpSession session=req.getSession();
            Date d2=new Date();
            String un=(String)session.getAttribute("user");
            Long t1=(Long)session.getAttribute("time");
            Long t2=d2.getTime();
            session.invalidate();
            out.println("Thankyou\t"+un);
            out.println("<br><br>Session duration: "+(t2-t1)/(60*60)+"seconds");
        }
        catch (Exception e)
        {
            e.printStackTrace();
        }
    }
}
```

web.xml

```
<?xml version="1.0"?>
<web-app>
<servlet>
<servlet-name>session1</servlet-name>
<servlet-class>Session1</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>session1</servlet-name>
<url-pattern>/session6vib</url-pattern>
</servlet-mapping>
<servlet>
<servlet-name>session2</servlet-name>
<servlet-class>Session2</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>session2</servlet-name>
<url-pattern>/session26vib</url-pattern>
</servlet-mapping>
</web-app>
```

WEB DESIGNING LAB

Output:



WEB DESIGNING LAB

9(ii)(b). Write a Servlet application to print the current date and time. Aim: To print Current date and time using Servlet.

USING SERVLET

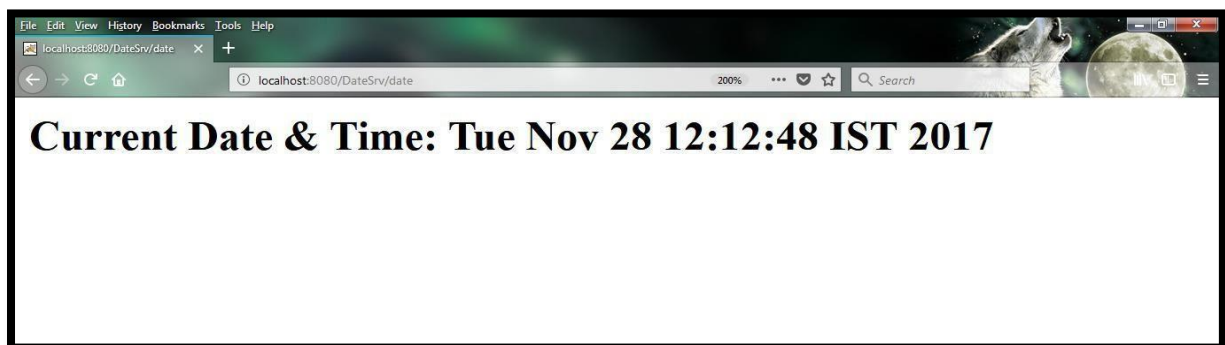
DateSrv.java

```
import java.io.*;
import javax.servlet.*;
public class DateSrv extends GenericServlet
{
    //implements service()
    public void service(ServletRequest req, ServletResponse res) throws IOException,
    ServletException
    {
        //set response content type
        res.setContentType("text/html");
        //get stream object
        PrintWriter pw = res.getWriter();
        //write request processing logic
        java.util.Date date = new java.util.Date();
        pw.println("<h2>"+ "Current Date & Time: " + date.toString() + "</h2>");
        //close stream object
        pw.close();
    }
}
```

web.xml

```
<?xml version="1.0"?>
<web-app>
<servlet>
<servlet-name>Date</servlet-name>
<servlet-class>DateSrv</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>Date</servlet-name>
<url-pattern>/date</url-pattern>
</servlet-mapping>
</web-app>
```

Output:



WEB DESIGNING LAB

9 (iii) (b). A web application that takes name and age from an HTML page. If the age is less than 18, it should send a page with “Hello <name>, you are not authorized to visit the site” message, where <name> should be replaced with the entered name. Otherwise it should send “Welcome <name> to this site” message.

AIM: To design an application to validate age are less than 18 or more than 18 using SERVLET.

USING SERVLET

index.html:

```
<html>
<head>
    <title>VoterApp</title>
</head>
<body>
    <form action="http://localhost:8080/CheckAge/check" method="get">
        <fieldset style="width:20%;background-color:#80ffcc">
            <table>
                <tr><td>Name</td><td><input type="text" name="name"></td></tr>
                <tr><td>Age</td><td><input type="text" name="age"></td></tr>
                <tr><td></td>
                <td><input type="submit" value="Check Eligibility"></td></tr>
            </table>
        </fieldset>
    </form>
</body>
</html>
```

VoterSrv.java:

```
import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.http.*;

public class VoterSrv extends HttpServlet
{
    public void service(HttpServletRequest req, HttpServletResponse res) throws
    IOException, ServletException
    {
        //set response content type
        res.setContentType("text/html");
        //get print write obj
        PrintWriter pw = res.getWriter();
        //read form data from page as request parameter String
        name = req.getParameter("name");
        int age = Integer.parseInt(req.getParameter("age")); if
        (age >= 18)
        {
            pw.println("<font color='green' size='4'>Welcome"+name+"to this site</font>");
        }
        else
            pw.println("<font color='red' size='4'>Hello"+name+", you are not authorized to visit the
            site</font>");
    }
}
```

WEB DESIGNING LAB

```
//add hyperlink to dynamic page
pw.println("<br><br><a href='index.html'>back</a>");
//closethe stream
pw.close();
}
}
```

web.xml:

```
<web-app>
  <servlet>
    <servlet-name>abc</servlet-name>
    <servlet-class>VoterSrv</servlet-class>
  </servlet>
  <servlet-mapping>
    <servlet-name>abc</servlet-name>
    <url-pattern>/check</url-pattern>
  </servlet-mapping>
</web-app>
```

Output:



Name

Age



Welcome mrcetcse to this site

[back](#)



Name

Age



Hello cse, you are not authorized to visit the site

[back](#)

WEBDESIGNINGLAB

9 (iv) (b). A web application that lists all cookies stored in the browser on clicking “List Cookies” button. Add cookies if necessary.

AIM: To design an application to develop cookies using Servlet.

USING SERVLET

index.html

```
<html>
  <head>
    <title>CookiesExample</title>
  </head>
  <body>
    <form method='get' action='http://localhost:8080/MyServlet1/login'>
      <fieldset style="width:14%; background-color:#ccffcc">
        UserName:<input type="text" name="Name"/><br/>
        Password:<input type="password" name="Password"/><br/>
        <input type="submit" value="submit"/>
      </fieldset>
    </form>
  </body>
</html>
```

MyServlet1.java

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;

public class MyServlet1 extends HttpServlet
{
    public void doGet(HttpServletRequest request, HttpServletResponse response)
    {
        try {
            response.setContentType("text/html");
            PrintWriter pwriter = response.getWriter();

            String uname = request.getParameter("Name");
            String upassword = request.getParameter("Password");
            pwriter.print("Cookies Set:<br>Hello " + uname);
            pwriter.print("<br>Your Password is: " + upassword);

            // Creating two cookies
            Cookie c1 = new Cookie("Name", uname);
            Cookie c2 = new Cookie("Password", upassword);
            // Adding the cookies to response header
            response.addCookie(c1);
            response.addCookie(c2);
            pwriter.print("<br><a href='welcome'>LIST COOKIES</a>");
            pwriter.close();
        } catch (Exception exp) {
            System.out.println(exp);
        }
    }
}
```

WEBDESIGNINGLAB

MyServlet2.java

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class MyServlet2 extends HttpServlet
{
    public void doGet(HttpServletRequest request,
        HttpServletResponse
        response){try{
            response.setContentType("text/html");
            PrintWriter pwriter=response.getWriter();

            //Reading cookies
            Cookie c[]=request.getCookies();
            //Displaying Username and User Password value from cookie

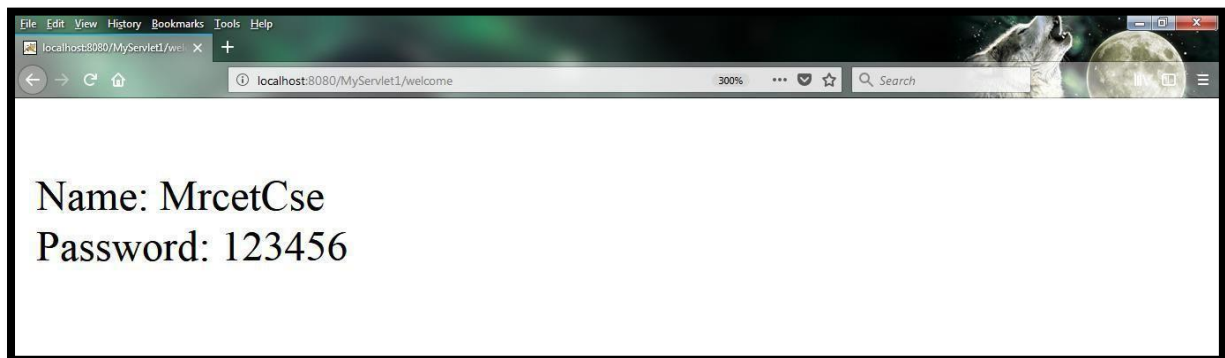
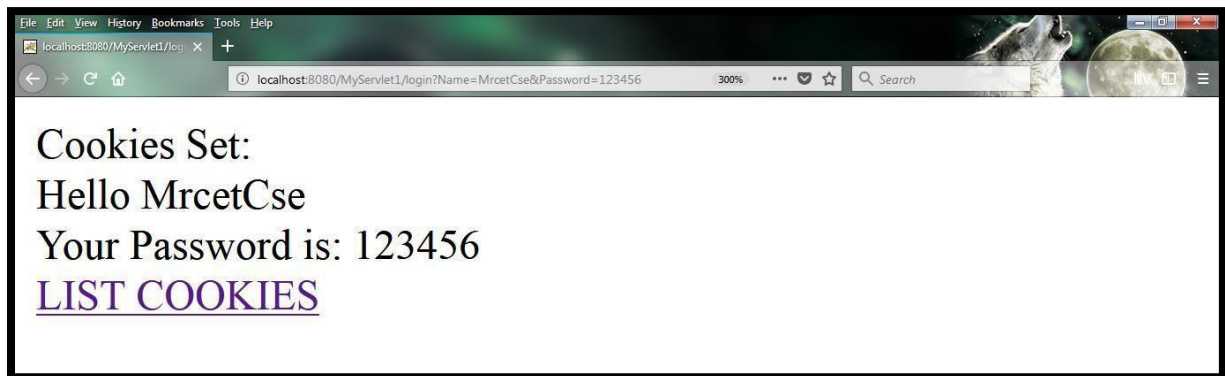
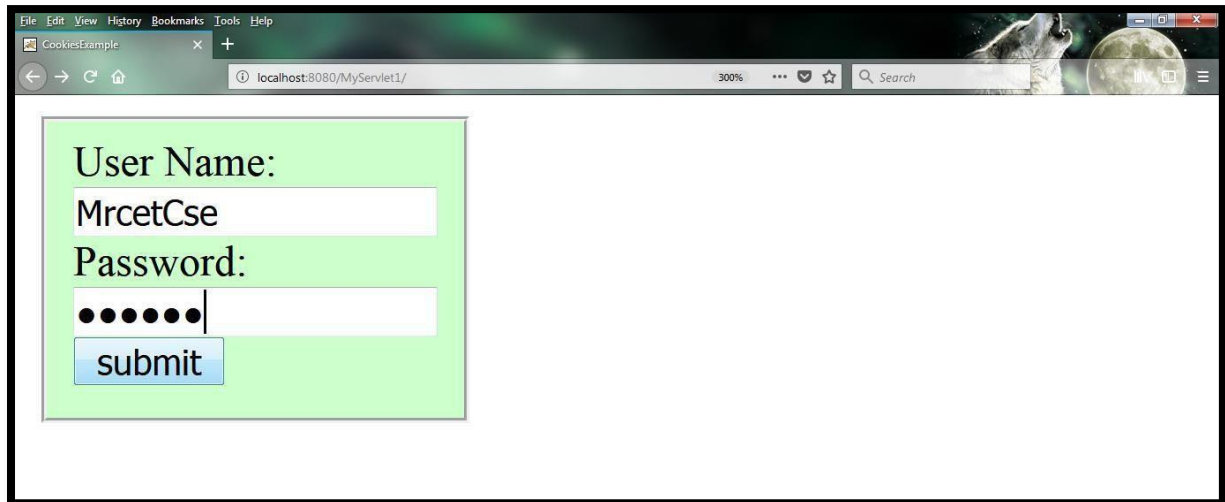
            for(int i=0;i<c.length;i++){
                pwriter.print("<br>" + c[i].getName() + ":" + c[i].getValue()); //printing name and value of
                cookie
            }
            pwriter.close();
        } catch (Exception
            exp){ System.out.println
                (exp);
            }
        }
    }
}
```

web.xml

```
<web-app>
<display-name>CookiesExample</display-name>
<welcome-file-list>
<welcome-file>index.html</welcome-file>
</welcome-file-list>
<servlet>
<servlet-name>Servlet1</servlet-name>
<servlet-class>MyServlet1</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>Servlet1</servlet-name>
<url-pattern>/login</url-pattern>
</servlet-mapping>
<servlet>
<servlet-name>Servlet2</servlet-name>
<servlet-class>MyServlet2</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>Servlet2</servlet-name>
<url-pattern>/welcome</url-pattern>
</servlet-mapping>
</web-app>
```

WEB DESIGNING LAB

Output:



WEB DESIGNING LAB

9(i)(c). A web application that takes a name as input and on submit it shows a hello <name> page where name is taken from the request. It shows the start time at the right top corner of the page and provides a logout button. On clicking this button, it should show a logout page with Thank You <name> message with the duration of usage (hint: Use session to store name and time).

USING JSP

Session.jsp.html

```
<html>
<head><title>SESSION LOGIN </title></head>
<body>
<center>
<form action="http://localhost:8080/jsp/Session1.jsp" method="get">
Enter Name: <input type="text" name="uname"><br>
<input type="submit" value="LOGIN" name="register">
</form>
</center>
</body>
</html>
```

Session1.jsp

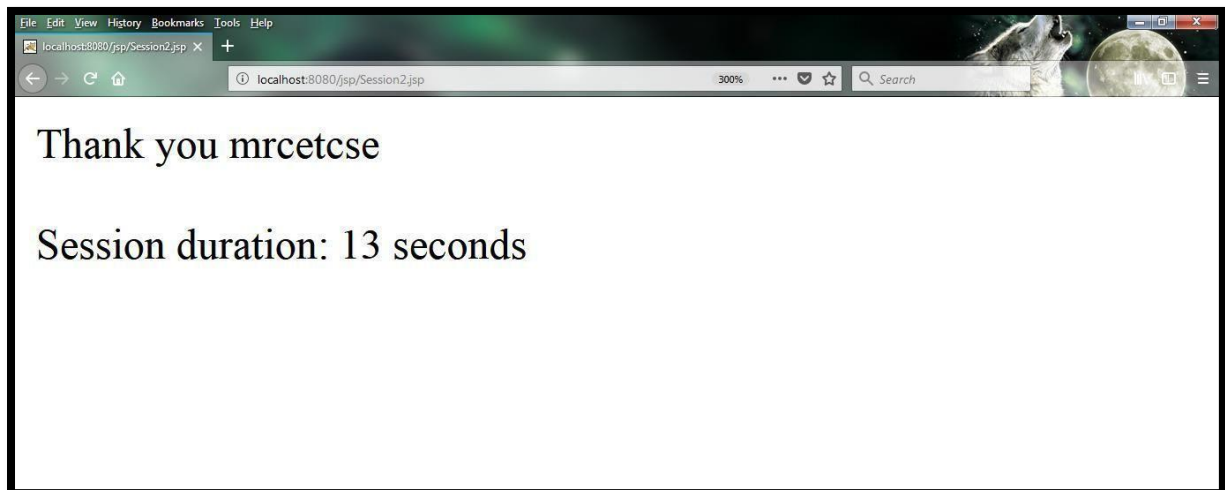
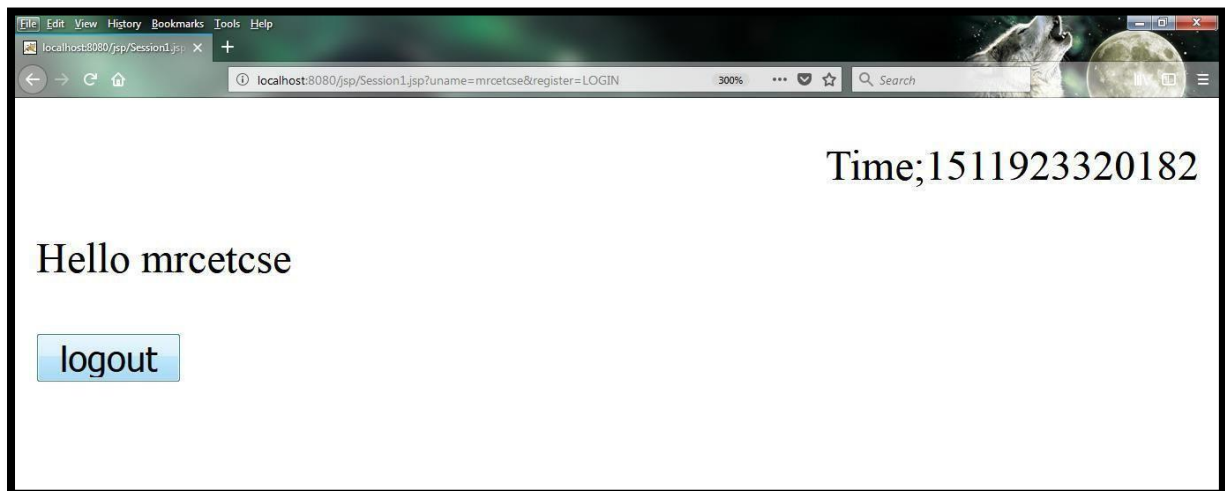
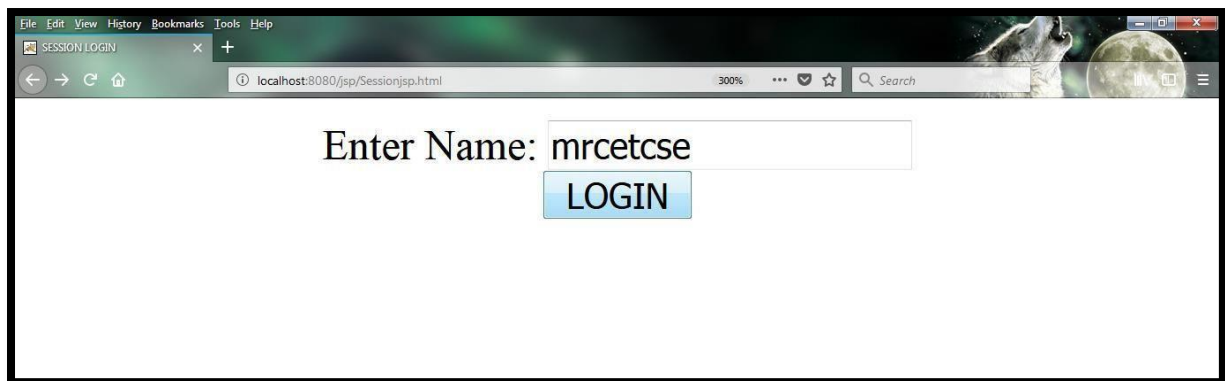
```
<%@page language="java" import="java.util.*" errorPage="" %>
<form method="get" action="http://localhost:8080/jsp/Session2.jsp">
<%
Dated=new Date();
%>
<p align="right">Time:<%=d.getTime()%></p>
<%
String un=request.getParameter("uname");
session.setAttribute("user",un);
session.setAttribute("time",d.getTime());
%>
Hello<%=un%>
<br><br>
<input type="submit" value="logout">
</form>
```

Session2.jsp

```
<%@page language="java" import="java.util.*" errorPage="" %>
<%
Dated2=new Date();
String un=(String)session.getAttribute("user");
Long t1=(Long)session.getAttribute("time");
Long t2=d2.getTime();
%>
Thankyou <%=un%>
<br><br>
Session duration:<%=(t2-t1)/(60*60)%>seconds
<%session.invalidate();%>
```

WEB DESIGNING LAB

Output:



WEB DESIGNING LAB

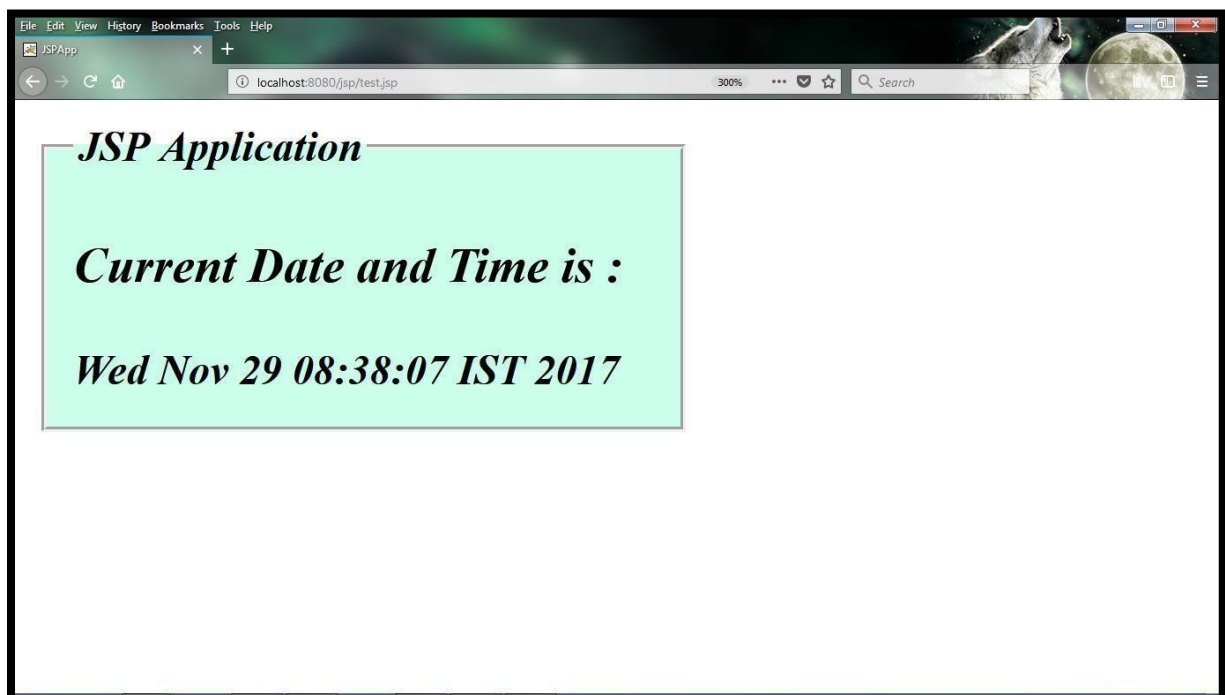
9(ii)(b). Write a JSP application to print the current date and time. Aim: To print Current date and time using JSP.

USING JSP

test.jsp

```
<html>
<head><title>JSPApp</title></head>
<body>
<form>
<fieldset style="width:50%;background-color:#ccffeb;">
<legend><b><i>JSP Application</i><b></legend>
<h3>Current Date and Time is:</h3>
<%java.util.Date d=new java.util.Date();
out.println(d.toString()); %>
</fieldset>
</form>
</body>
</html>
```

Output:



WEB DESIGNING LAB

9 (iii) (c). A web application that takes name and age from an HTML page. If the age is less than 18, it should send a page with “Hello <name>, you are not authorized to visit the site” message, where <name> should be replaced with the entered name. Otherwise it should send “Welcome <name> to this site” message.

AIM: To design an application to validate age are less than 18 or more than 18 using JSP.

USING JSP

UserEligibility.html:

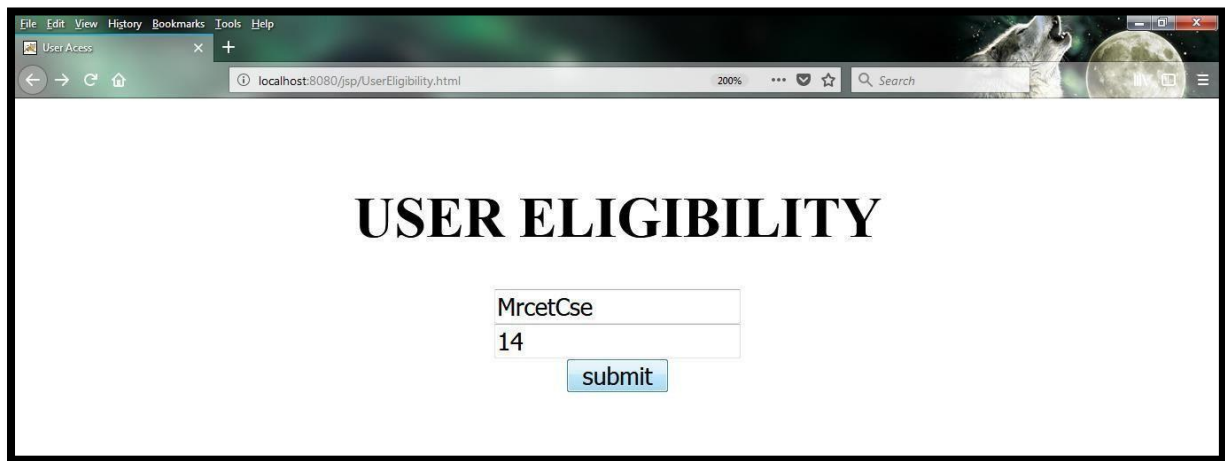
```
<html>
<head><title>UserAccess </title></head>
<body><br>
<center>
<h1>USERELIGIBILITY</h1>
<form action="http://localhost:8080/jsp/checkage.jsp" method="get">
<input type="text" name="uname" placeholder="Enter your name"><br>
<input type="text" name="uage" placeholder="Enter your age"><br>
<input type="submit" value="submit" name="sub">
</form>
</center>
</body>
</html>
```

checkage.jsp:

```
<%@page language="java" import="java.sql.*" errorPage="" %>
<%
String name;
int age;
name = request.getParameter("uname");
age = Integer.parseInt(request.getParameter("uage"));
if (age <= 18)
{
out.println("<h1>Hello\t" + name + "\tyou are not eligible</h1>");
}
else
{
out.println("<h1>Welcome" + name + "to this site</h1>");
}
%>
```

WEB DESIGNING LAB

Output:

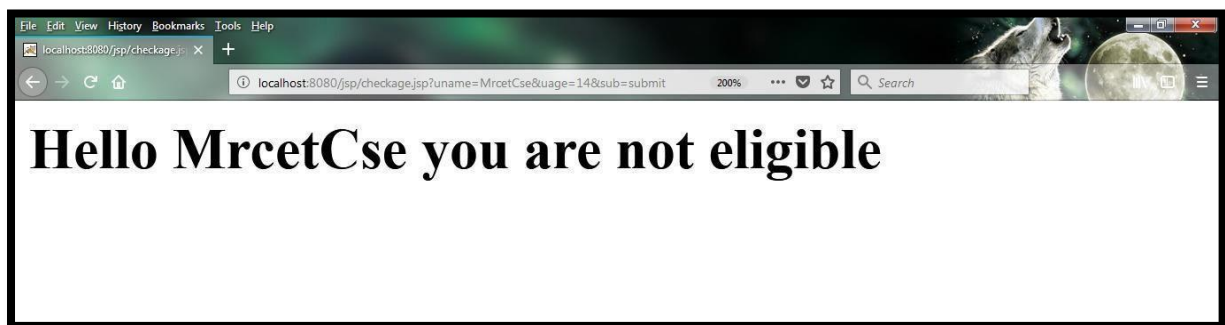


USER ELIGIBILITY

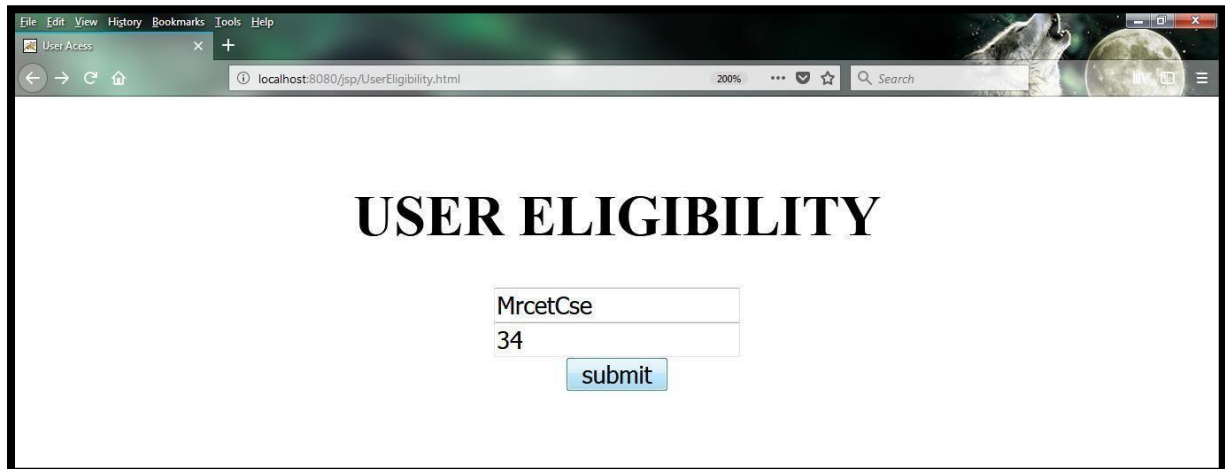
MrcetCse

14

submit



Hello MrcetCse you are not eligible



USER ELIGIBILITY

MrcetCse

34

submit



Welcome MrcetCse to this site

WEB DESIGNING LAB

9 (iv) (c). A web application that lists all cookies stored in the browser on clicking “List Cookies” button. Add cookies if necessary.

AIM: To design an application to develop cookies using JSP.

USING JSP

cookie.html

```
<html>
<head><title>Calculator</title></head>
<body>
<form action="http://localhost:8080/jsp/cookie1.jsp" method="post">
Enter your name: <input type="text" name="name1" placeholder="Enter name">
<input type="submit" value="Add cookie">
</form>
</center>
</body>
</html>
```

cookie1.jsp

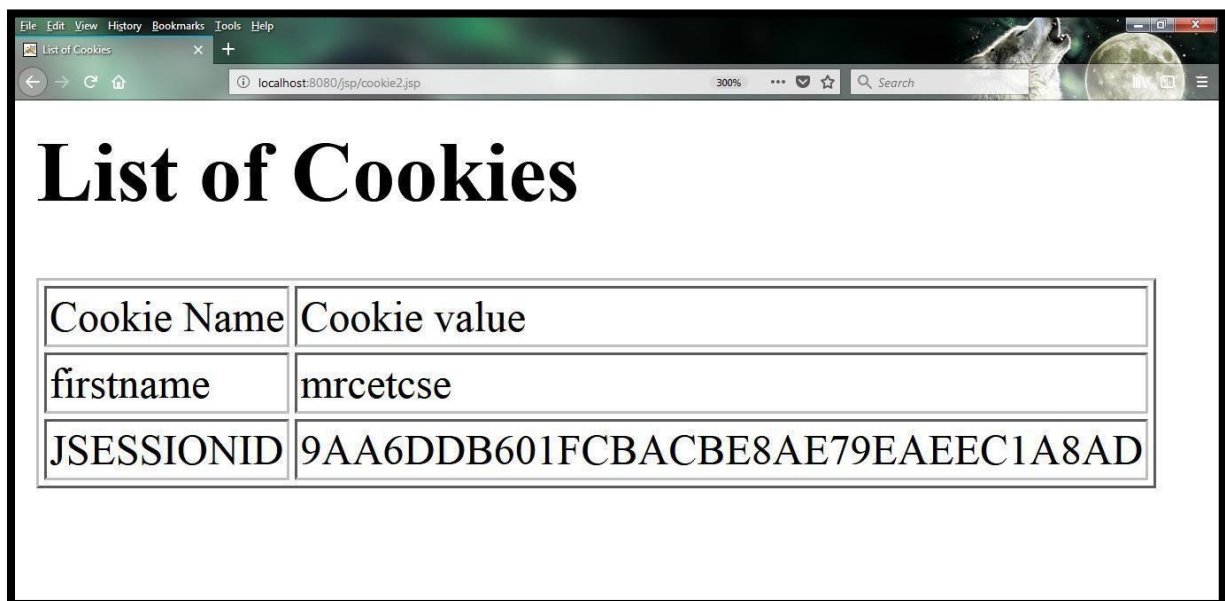
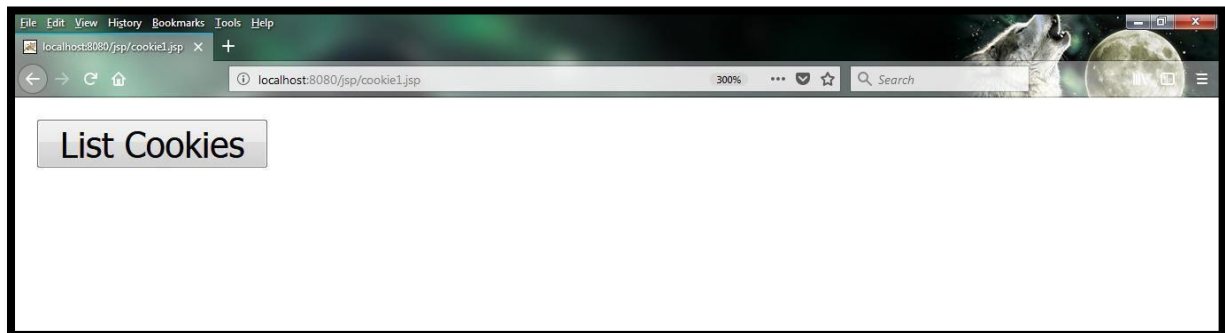
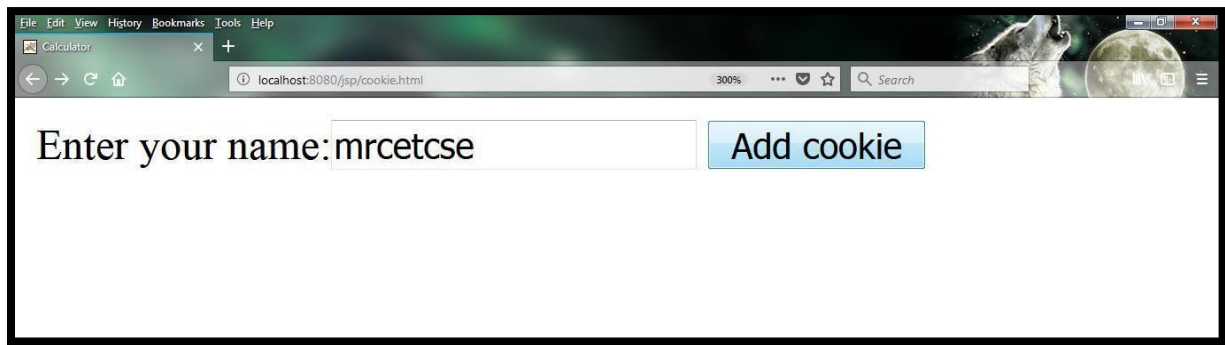
```
<%@page language="java" import="java.sql.*" errorPage="" %>
<%
String name=request.getParameter("name1");
Cookie c1=new Cookie ("firstname",name);
response.addCookie(c1);
c1.setMaxAge(50*50);
%>
<form method="get" action="http://localhost:8080/jsp/cookie2.jsp">
<input type="submit" value="List Cookies">
</form>
```

cookie2.jsp

```
<%@page language="java" import="java.sql.*" errorPage="" %>
<title>List of Cookies</title>
<h1>List of Cookies</h1>
<%
Cookie[] cookies=request.getCookies();
%>
<table border=1>
<tr>
<%
out.println("<td>CookieName</td><td>Cookievalue</td>");
for(int i=0;i<cookies.length;i++)
{
out.println("<h2><tr><td>"+cookies[i].getName()+"</td><td>"+cookies[i].getValue()+"</td>
</tr>");
}
%>
</tr>
</table>
```

WEB DESIGNING LAB

Output:



WEB DESIGNING LAB

**WEEK-10:Implementthe webapplicationswithDatabase using
(a)PHP,(b)Servletsand(c) JSP.**

a) A user validation web application, where the user submits the login name& password to the server. The name and password are checked against the data already available in Database and if the data matches, a successful login page is returned. Otherwise failure message is shown to the user.

AIM:TodesignanapplicationthatverifiesuserdetailsfromdatabaseusingPHP.

PROGRAM:

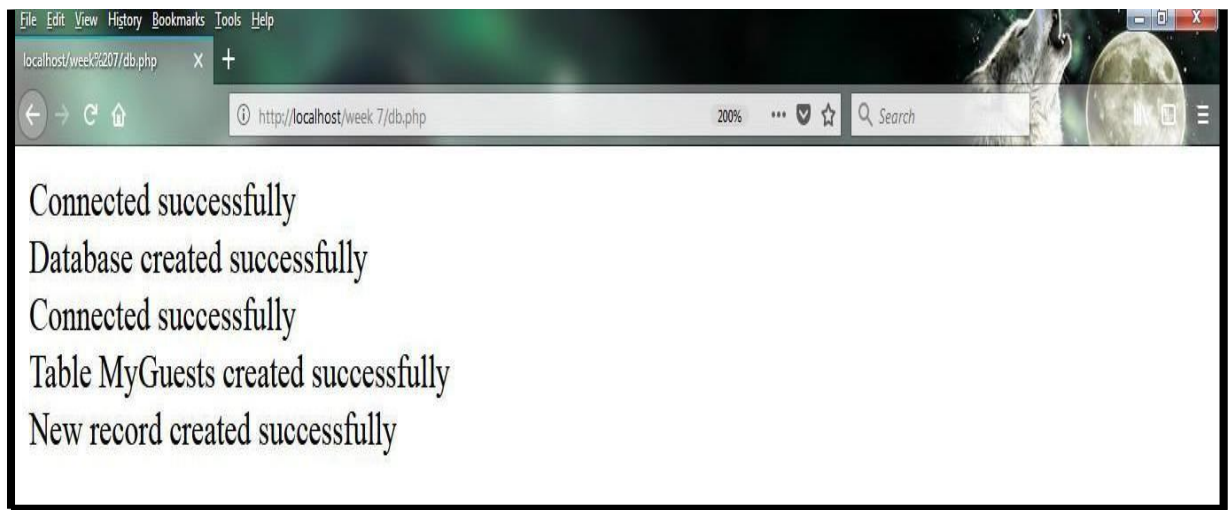
db.php

```
<html>
<body>
<?php
$servername="localhost";
$username="root";
$password="TIGER";
$conn=newmysqli($servername,$username,$password);
if($conn->connect_error)
{
die("connectionfailed".$conn->connect_error);
}
echo"Connectedsuccessfully<br>";
//Createdatabase
$sql="CREATEDATABASEreg";
if(mysqli_query($conn,$sql))
echo"Databascreatedsuccessfully<br>";
else
echo"error";
$servername="localhost";
$dbname="reg";
$conn=mysqli_connect($servername,$username,$password, $dbname);
//Checkconnection
if (!$conn)
{
die("Connectionfailed:".mysqli_connect_error());
}
echo"Connectedsuccessfully<br>";
//sqltcreatetable
$sql="CREATETABLEGuests
(nameVARCHAR(30)NOTNULL,
pwd VARCHAR(30) NOT NULL)";
if(mysqli_query($conn,$sql))
{
echo"TableMyGuestscreated successfully<br>";
}
else{
echo "Errorcreatingtable:".mysqli_error($conn);
}
$sql="INSERTINTOGuests(name,pwd)VALUES('cse', '5')";
```

WEB DESIGNING LAB

```
if(mysqli_query($conn,$sql)){  
echo"Newrecordcreatedsuccessfully";  
}  
else  
{  
echo "Error:". $sql."<br>".mysqli_error($conn);  
}  
mysqli_close($conn);  
?>  
</body>  
</html>
```

Outputofdb.php:



Login.html

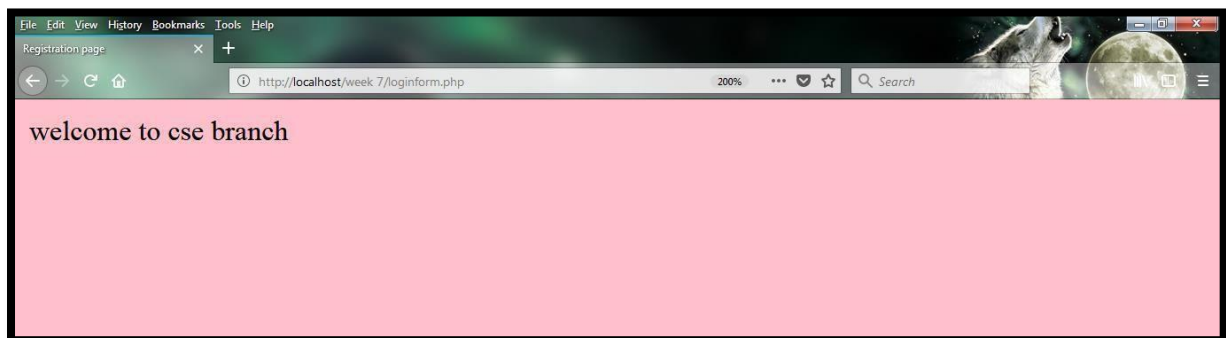
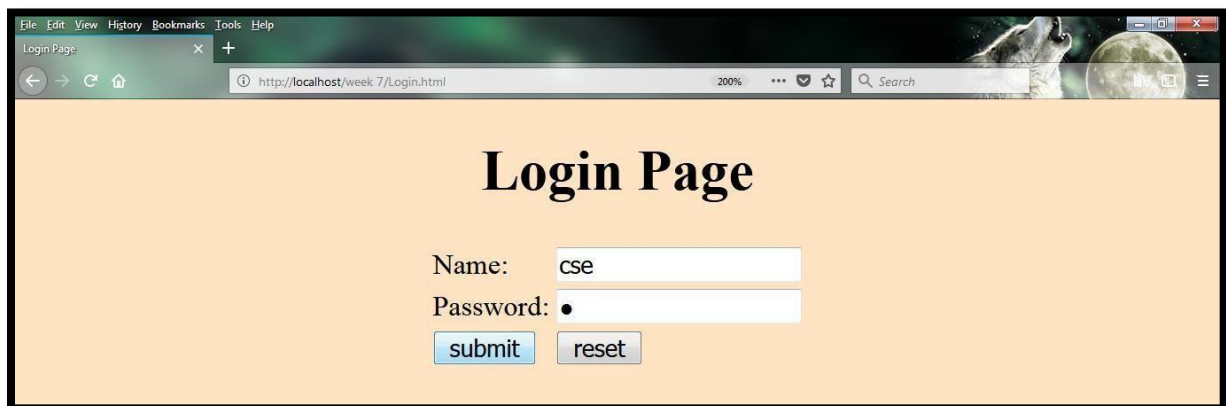
```
<html>  
<head><title>LoginPage</title></head>  
<body>  
<center><h1>LoginPage</h1>  
<formaction="loginform.php"method="post">  
<table>  
<tr><td><label>Name: </label></td>  
<td><inputtype="text"name="uname"/></td>  
</tr>  
<tr><td><label>Password:</label></td>  
<td><inputtype="password"name="upwd"/></td>  
</tr>  
<tr><td><inputtype="submit"value="submit"/></td>  
<td><inputtype="reset"value="reset"/></td>  
</tr>  
</table>  
</form>  
</center>  
</body>  
</html>
```


WEB DESIGNING LAB

loginform.php

```
<html>
<head><title>Registrationpage</title></head>
<body>
  <?php
    $name=$_POST["uname"];
    $pwd=$_POST["upwd"];
    $conn=mysql_connect("localhost","root","TIGER")or die("mysql_error()");
    mysql_select_db("reg") or die("mysql_error()");
    $query=mysql_query("SELECT*fromguestswherename='$name'");
    while($row=mysql_fetch_array($query))
    {
      $duser=$row['name'];
      $dpwd=$row['pwd'];
    }
    if($pwd==$dpwd&&$name==$duser)
      echo "welcome $name branch";
    else
      echo"invaliduser";
  ?>
</body>
</html>
```

OUTPUT:



WEB DESIGNING LAB

(b)

USINGSERVLET

DBExample.java

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.util.*;
import java.sql.*;

public class DBExample extends
    HttpServlet { public void
    doGet(HttpServletRequest request,
        HttpServletResponse response)
        throws ServletException, IOException
    {
        String JDBC_DRIVER="com.mysql.jdbc.Driver";
        String DB_URL="jdbc:mysql://localhost/csec";
        String USER = "root";
        String PASS="TIGER";
        response.setContentType("text/html");
        PrintWriter out=response.getWriter();
        out.println("<html><body><h1>WelcometoMRCET</h1>\n");
        try{
            Class.forName("com.mysql.jdbc.Driver");
            Connection conn=DriverManager.getConnection(DB_URL,
            USER, PASS);
            Statement stmt=conn.createStatement();
            String sql;
            sql="SELECT *FROM Emp";
            ResultSet rs=stmt.executeQuery(sql);
            while(rs.next()){
                out.println("ID: " + rs.getString(1));
                out.println("Age: " + rs.getString(2));
                out.println("FirstName:" +rs.getString(3)+"<br>");
            }
            rs.close();
            stmt.close();
            conn.close();
        } catch(SQLException
            se){ out.println(se.getMessage());
        } catch(Exception
            e) {out.println(e.getMessag
            e());
        }
        out.println("</body></html>");
    }
}
```

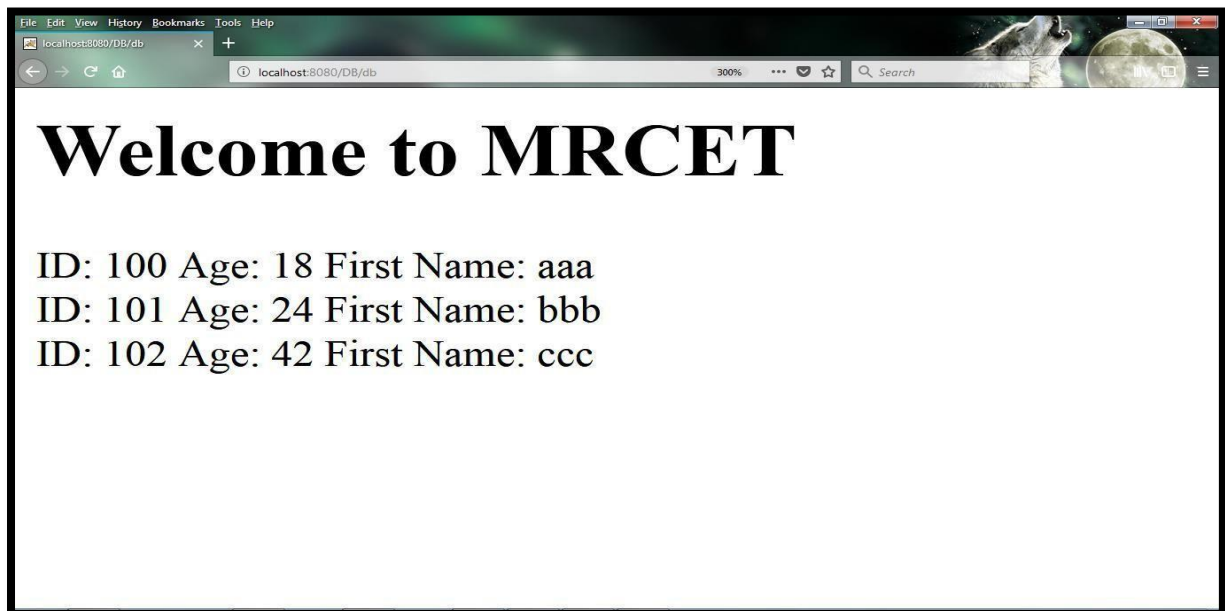
WEB DESIGNING LAB

web.xml:

```
<?xmlversion="1.0"encoding="UTF-8"?>

<web-app>
<servlet>
<servlet-name>DBExample</servlet-name>
<servlet-class>DBExample</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>DBExample</servlet-name>
<url-pattern>/db</url-pattern>
</servlet-mapping>
</web-app>
```

OUTPUT:



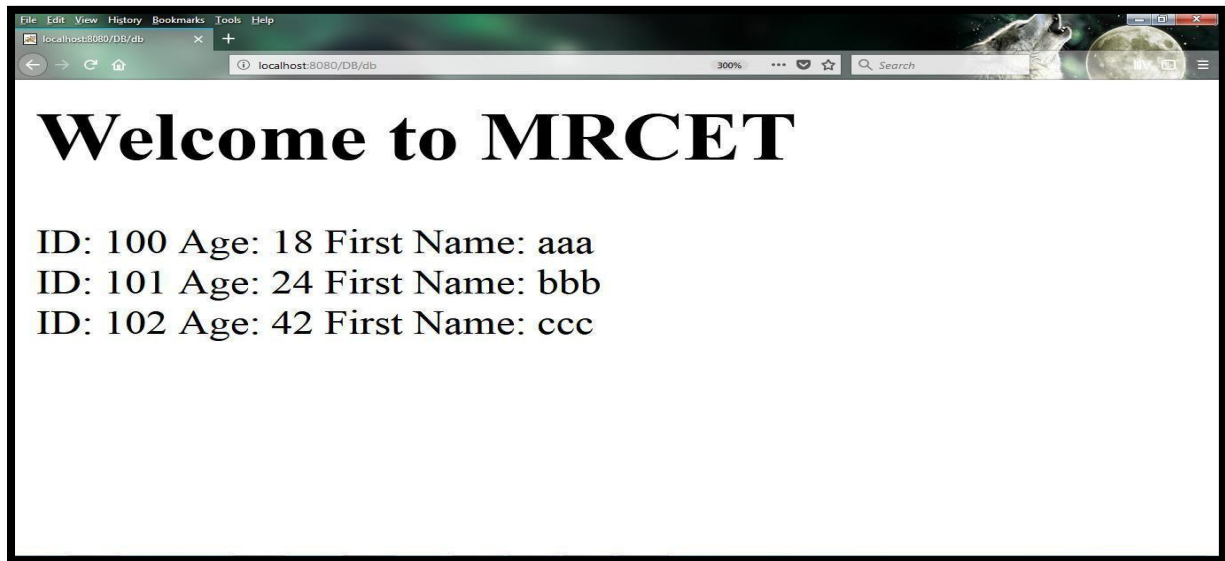
WEB DESIGNING LAB

(c)

USINGJSP

```
import java.sql.*;
class MysqlCon {
    public static void main(String
    args[]) { try { Class.forName("com.mysql.j
    dbc.Driver");
    Connection
    con = DriverManager.getConnection("jdbc:mysql://
    localhost:3306/sonoo", "root", "root");
    //heresonoo is database name, root is username and password
    Statement
    stmt = con.createStatement();
    ResultSet rs = stmt.executeQuery("select * from emp");
    while (rs.next())
    System.out.println(rs.getInt(1) + "" + rs.getString(2) + "" + rs.getString(3));
    con.close();
    } catch (Exception e) { System.out.println(e); }
    }
}
```

OUTPUT:



WEB DESIGNING LAB

WEEK-11:

Modify the above PHP program to use an xml instead of database

AIM: To design an application that verifies user details from an xml using PHP.

PROGRAM:

db.php

Userlogin.xml:

```
<Authentication>
  <user>
    <username>cse</username>
    <password>5</password>
  </user>
  <user>
    <username>mrcet</username>
    <password>mlrd</password>
  </user>
</Authentication>
```

Loginform.php:

```
<html>
<head>
  <title>Registrationpage</title>
</head>
<body bgcolor="pink">

<?php
  $myxml=simplexml_load_file("Userlogin.xml");
  $username=$_POST['uname'];
  $password=$_POST['upwd'];
  $xmlusername="";
  $xmlpassword="";

  for($i=0;$i<count($myxml);$i++)
  {
    $xmlusername=$myxml->user[$i]->username;
    $xmlpassword=$myxml->user[$i]->password;

    if($xmlusername==$username&&$xmlpassword==$password)
    {
      echo"welcome$username";
      die();
    }
  }
  echo"Invalidusernameorpassword";
?>

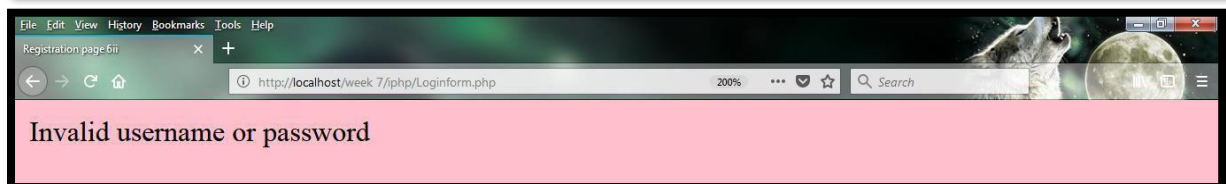
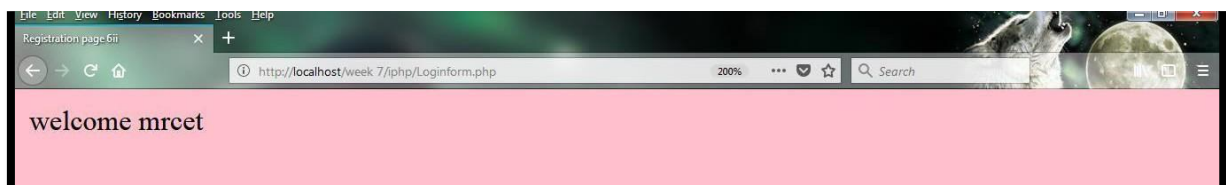
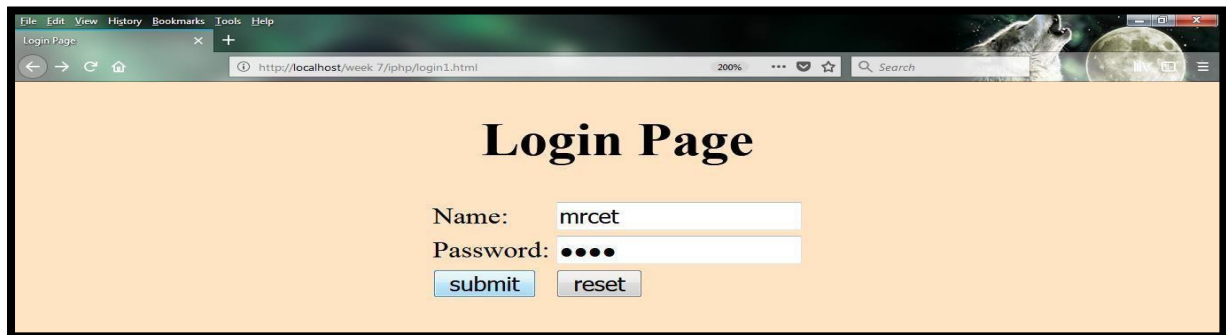
</body>
</html>
```

WEB DESIGNING LAB

Loginform.php:

```
<html>
  <head><title>LoginPage</title></head>
<bodybgcolor="bisque">
  <center>
    <h1>LoginPage</h1>
    <formaction="Loginform.php"method="post">
      <table>
        <tr><td><label>Name: </label></td>
        <td><inputtype="text"name="uname"/></td>
      </tr>
        <tr><td><label>Password:</label></td>
        <td><inputtype="password"name="upwd"/></td>
      </tr>
        <tr><td><inputtype="submit"value="submit"/>
      </td>
        <td><inputtype="reset"value="reset"/></td>
      </tr>
    </table>    </form>    </center>    </body>    </html>
```

OUTPUT:



WEB DESIGNING LAB

WEEK-12:

Write a program to design a simple calculator using (a) JavaScript (b) PHP (c) Servlet and (d) JSP.

(a) USING JavaScript AIM

: To design a simple calculator using JAVASCRIPT.

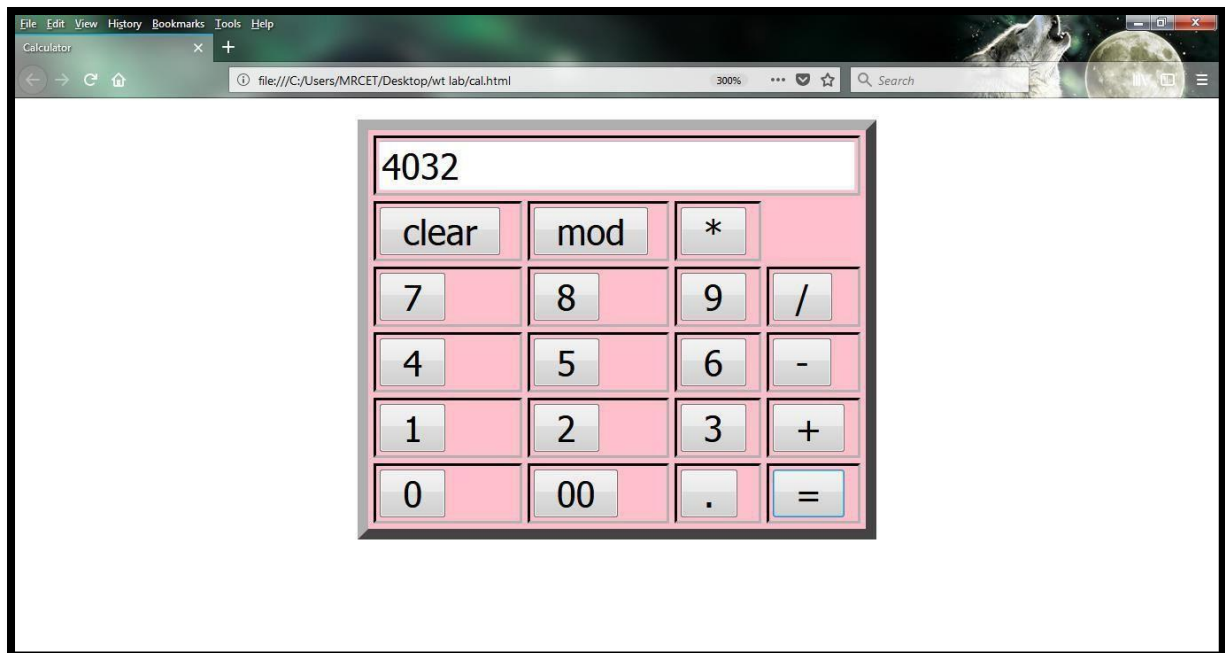
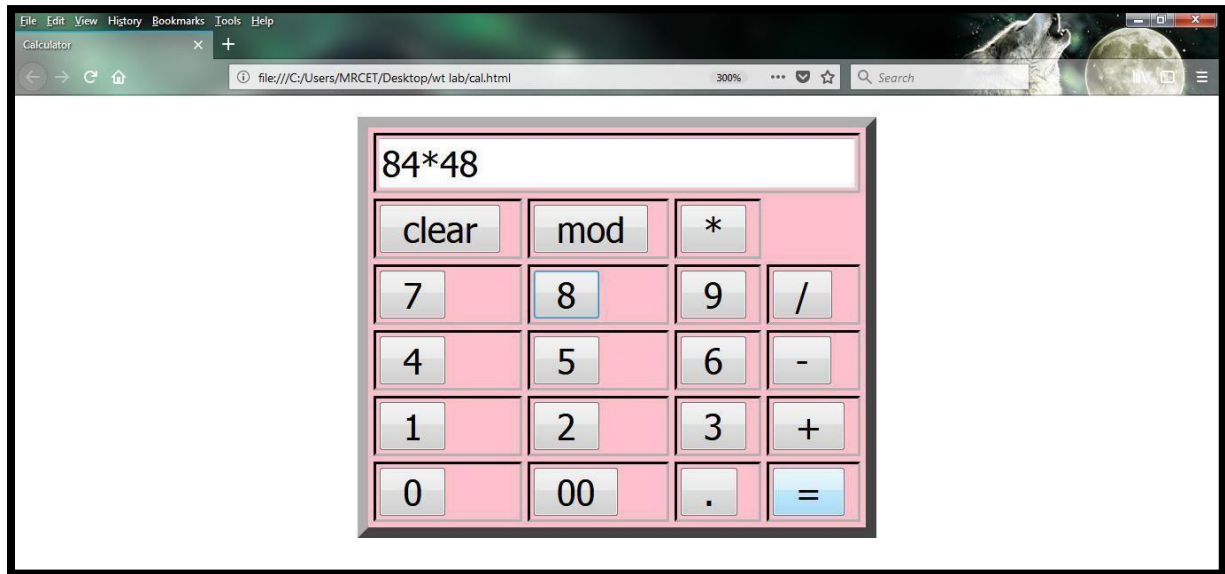
PROGRAM:

cal.html

```
<html>
<head>
  <title>Calculator</title>
  <script language="javascript">
    var inputstring="";
    function updatestring(value)
    {
      inputstring=inputstring+value;
      document.calculator.input.value=inputstring;
    }
  </script>
</head>
<body>
  <form name="calculator">
    <table border="4" align="center" bgcolor="pink" bordercolor="black">
      <tr>
        <td colspan="4"><input type="text" name="input" maxlength="15" size="27"></td></tr>
      <tr>
        <td><input type="button" value="clear" onclick="input.value='';inputstring=''"></td>
        <td><input type="button" value="mod" onclick="updatestring('%)"></td>
        <td><input type="button" value="*" onclick="updatestring('*)"></td>
        <td></td>
      </tr>
      <tr>
        <td><input type="button" value="7" onclick="updatestring('7)"></td>
        <td><input type="button" value="8" onclick="updatestring('8)"></td>
        <td><input type="button" value="9" onclick="updatestring('9)"></td>
        <td><input type="button" value="/" onclick="updatestring('/')"></td>
      </tr>
      <tr>
        <td><input type="button" value="4" onclick="updatestring('4)"></td>
        <td><input type="button" value="5" onclick="updatestring('5)"></td>
        <td><input type="button" value="6" onclick="updatestring('6)"></td>
        <td><input type="button" value="-" onclick="updatestring('-)"></td>
      </tr>
      <tr>
        <td><input type="button" value="1" onclick="updatestring('1)"></td>
        <td><input type="button" value="2" onclick="updatestring('2)"></td>
        <td><input type="button" value="3" onclick="updatestring('3)"></td>
        <td><input type="button" value="+" onclick="updatestring('+)"></td>
      </tr>
      <tr>
        <td><input type="button" value="0" onclick="updatestring('0)"></td>
        <td><input type="button" value="00" onclick="updatestring('00)"></td>
        <td><input type="button" value="." onclick="updatestring('.')"></td>
        <td><input type="button" value="=" onclick="input.value=eval(inputstring);"></td>
      </tr>
    </table>
  </form>
</body>
</html>
```

WEB DESIGNING LAB

OUTPUT:



WEB DESIGNING LAB

(b)

USING PHP

AIM: To design an application that works as a simple calculator using PHP.

PROGRAM:

form.html

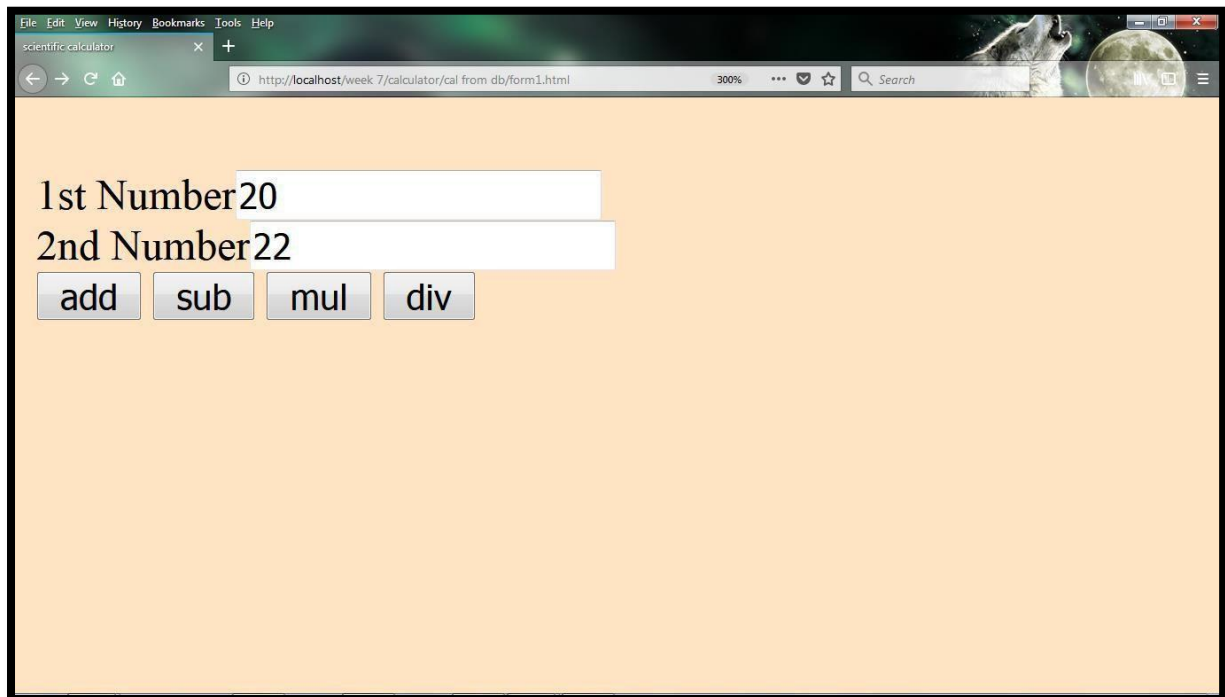
```
<html>
<head><title>scientificcalculator</title></head>
<body bgcolor="bisque"><br>
<form name='f1' action='add.php' method='post'>
1st Number<input type='text' name='t1'><br>
2nd Number<input type='text' name='t2'><br>
<input type='submit' name='add' value='add'>
<input type='submit' name='sub' value='sub'>
<input type='submit' name='mul' value='mul'>
<input type='submit' name='div' value='div'>
</form>
</body>
</html>
```

add.php

```
<?php
$a=$_POST['t1'];
$b=$_POST['t2'];
if(isset($_POST['add']))
{
$c=$a+$b;
print$a."+".$b."=".$c;
}
if(isset($_POST['sub']))
{
$c=$a-$b;
print$a."-".$b."=".$c;
}
if(isset($_POST['mul']))
{
$c=$a* $b;
print$a."*".$b."=".$c;
}
if(isset($_POST['div']))
{
$c=$a/ $b;
print$a."/".$b."=".$c;
}
?>
```

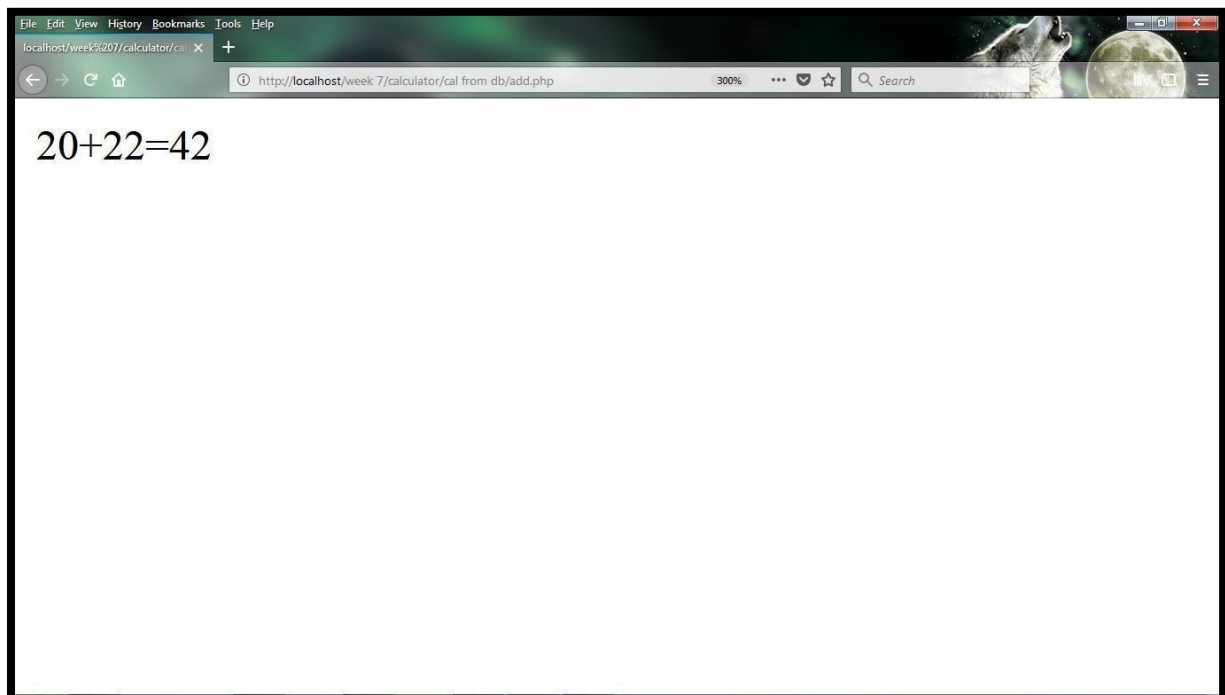
WEB DESIGNING LAB

Output:



A screenshot of a web browser window displaying a calculator form. The browser's address bar shows the URL `http://localhost/week 7/calculator/cal from db/form1.html`. The form has a light orange background and contains the following elements:

- Two input fields: "1st Number" with the value "20" and "2nd Number" with the value "22".
- Four buttons labeled "add", "sub", "mul", and "div".



A screenshot of a web browser window showing the result of the calculation. The browser's address bar shows the URL `http://localhost/week 7/calculator/cal from db/add.php`. The page displays the result:

20+22=42

WEB DESIGNING LAB

(c)

USINGSERVLETS

AIM: Develop Servlet Application of Basic Calculator(+,-,*,/,%) using ServletInputStream and ServletOutputStream.

DESCRIPTION:

In java with using 2 operand's and 1 operator we can calculate the basic mathematically operation such as addition, subtraction, multiplication, division Servlet is a Java class which extends the capabilities of server that provides the application accessed by means of request response model. It uses two interfaces i.e. HttpServletRequest & HttpServletResponse

HttpServletRequest: This is an interface which provides methods for extracting HTTP parameters from the query or request body depending on the type of request i.e. get or post

HttpServletResponse: This interface provides an OutputStream for retrieving information such as images or PrintWriter for retrieving text output.

PROGRAM:

index.html

```
<html>
<head>
  <title>SimpleCalculator</title>
</head>
<body>
<h3>PleaseEnterTwoNumbers :::</h3>
<formmethod="GET"action="http://localhost:8080/Cal/calc">
Number:<input type="text" id="t1" name="t1"/><br/>
<selectname="op">
<optionvalue="+">+</option>
<optionvalue="-">-</option>
<optionvalue="*">*</option>
<optionvalue="/">/</option>
<optionvalue="%">%</option>
</select><br/>
Number:<inputtype="text" id="t2" name="t2">
<inputtype="submit" value="calculate"/><br/>
</form>
</body>
</html>
```

Cal.java

```
importjava.io.IOException;
import java.io.PrintWriter;
importjavax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
importjavax.servlet.http.HttpServletResponse;
public class Cal extends HttpServlet
{
publicvoiddoGet(HttpServletRequestrequest,HttpServletResponse response)
```

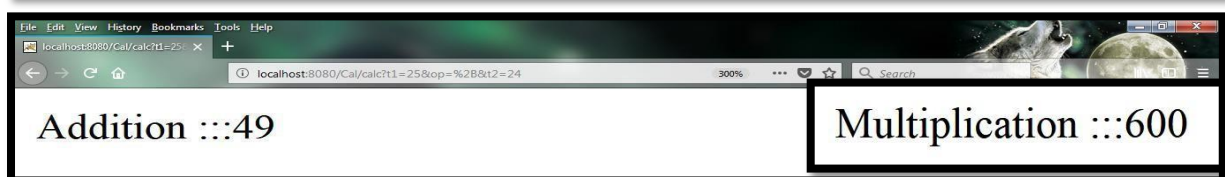
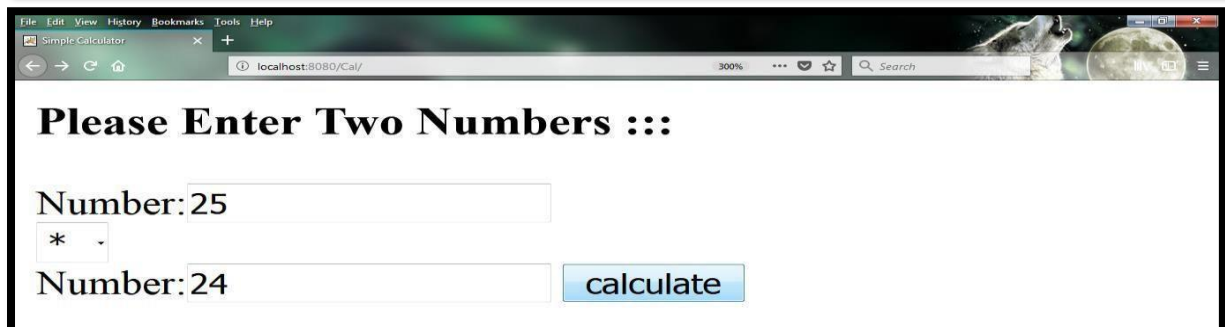
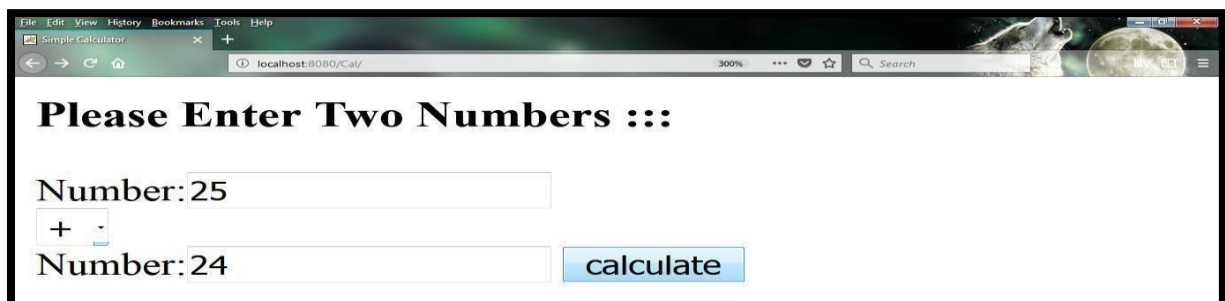
WEB DESIGNING LAB

```
throws ServletException, IOException
{response.setContentType("text/html;charset=UTF-
8");PrintWriter pw= response.getWriter();
int n1 = Integer.parseInt(request.getParameter("t1"));
int n2 = Integer.parseInt(request.getParameter("t2"));
String op=request.getParameter("op");
if(op.equals("+")){pw.println("Addition::" +(n1+n2));}
elseif(op.equals("-")){pw.println("Subtraction::" +(n1-n2));}
elseif(op.equals("*")){pw.println("Multiplication::" +(n1*n2));}
elseif(op.equals("/")){pw.println("Division::" +(n1/n2));}
else{pw.println("Remainder ::" +(n1%n2));}
pw.close();
}
}
```

web.xml

```
<web-app>
<servlet>
  <servlet-name>Calculator</servlet-name>
  <servlet-class>Cal</servlet-class>
</servlet>
<servlet-mapping>
  <servlet-name>Calculator</servlet-name>
  <url-pattern>/calc</url-pattern>
</servlet-mapping>
</web-app>
```

Output:



(d)

USING.JSP

Aim: To design a calculator using JSP.

calculator.html

```
<html>
<title>calculator</title>
<head><h1><center>Basic Calculator</center></h1></head>
<body>
<center>
<form action="http://localhost:8080/jsp/calculator.jsp" method="get">

<label for="num1"><b>Number1</b></label>
<input type="text" name="num1"><br><br>
<label for="num2"><b>Number2</b></label>
<input type="text" name="num2"><br><br>

<input type="radio" name="r1" value="Add">+
<input type="radio" name="r1" value="Sub">-<br>
<input type="radio" name="r1" value="mul">*
<input type="radio" name="r1" value="div">/<br><br>

<input type="submit" value="submit">
</center>
</body>
</html>
```

calculator.jsp

```
<html>
<title>calculator</title>
<head></head>
<body>
<%@page language="java"%>
<%
int num1=Integer.parseInt(request.getParameter("num1"));
int num2=Integer.parseInt(request.getParameter("num2"));
String operation = request.getParameter("r1");
if(operation.equals("Add")){
int add=num1+num2;
out.println("Addition is:"+add);
}
else
if(operation.equals("Sub")){ int
sub=num1-num2;
out.println("Subtraction is:"+sub);
}
else
if(operation.equals("mul")){ int
mul=num1*num2;
out.println("multiplication is:"+mul);
}
elseif(operation.equals("div"))
{
int div =num1/num2;
```

WEB DESIGNING LAB

```
if(num1>=num2)
out.println("divisionis:"+div);
else
out.println("Thedivisioncannotbe performed");
}
%>
</body>
</html>
```

OUTPUT:

