WEB APPLICATION DEVELOPMENT LAB

(R22A1283)

LABORATORY MANUAL

B.TECH
(III YEAR – I SEM)
(2024-2025)

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DEPARTMENT OF INFORMATION TECHNOLOGY

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous Institution – UGC, Govt. of India)
Recognized under 2(f) and 12 (B) of UGC ACT 1956
Affiliated to JNTUH, Hyderabad, Approved by AICTE - Accredited by NBA & NAAC – 'A' Grade - ISO 9001:2008 Certified)
Maisammaguda, Dhulapally (Post Via. Hakimpet), Secunderabad – 500100, Telangana State, India

DEPARTMENT OF INFORMATION TECHNOLOGY

Vision

- To acknowledge quality education and instill high patterns of discipline making the students technologically superior and ethically strong which involves the improvement in the quality of life in human race.

Mission

- To achieve and impart holistic technical education using the best of infrastructure, outstanding technical and teaching expertise to establish the students into competent and confident engineers.
- Evolving the center of excellence through creative and innovative teaching learning practices for promoting academic achievement to produce internationally accepted competitive and world class professionals.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

PEO1 – ANALYTICAL SKILLS

1. To facilitate the graduates with the ability to visualize, gather information, articulate, analyze, solve complex problems, and make decisions. These are essential to address the challenges of complex and computation intensive problems increasing their productivity.

PEO2 – TECHNICAL SKILLS

2. To facilitate the graduates with the technical skills that prepare them for immediate employment and pursue certification providing a deeper understanding of the technology in advanced areas of computer science and related fields, thus encouraging to pursue higher education and research based on their interest.

PEO3 – SOFT SKILLS

3. To facilitate the graduates with the soft skills that include fulfilling the mission, setting goals, showing self-confidence by communicating effectively, having a positive attitude, get involved in team-work, being a leader, managing their career and their life.

PEO4 – PROFESSIONAL ETHICS

4. To facilitate the graduates with the knowledge of professional and ethical responsibilities by paying attention to grooming, being conservative with style, following dress codes, safety codes,and adapting themselves to technological advancements.

PROGRAM SPECIFIC OUTCOMES (PSOs)

After the completion of the course, B. Tech Computer Science and Engineering, the graduates willhave the following Program Specific Outcomes:

1. **Fundamentals and critical knowledge of the Computer System:-** Able to Understand the working principles of the computer System and its components , Apply the knowledge to build, asses, and analyze the software and hardware aspects of it .

2. **The comprehensive and Applicative knowledge of Software Development:** Comprehensive skills of Programming Languages, Software process models, methodologies, and able to plan, develop, test, analyze, and manage the software and hardware intensive systems in heterogeneous platforms individually or working in teams.

3. **Applications of Computing Domain & Research:** Able to use the professional, managerial, interdisciplinary skill set, and domain specific tools in development processes, identify the research gaps, and provide innovative solutions to them.

PROGRAM OUTCOMES (POs)

Engineering Graduates will be able to:

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

2. **Problem analysis**: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles ofmathematics, natural sciences, and engineering sciences.
3. **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.
4. **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.
5. **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.
6. **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.
7. **Environment and sustainability**: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, andneed for sustainable development.
8. **Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work**: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **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 giveand receive clear instructions.
11. **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 multi disciplinary environments.
12. **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

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

Maisammaguda, Dhulapally Post, Via Hakimpet, Secunderabad – 500100

DEPARTMENT OF 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. Student 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.

HEAD OF THE DEPARTMENT **PRINCIPAL**

COURSE 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.

COURSE 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 latesttechnical 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 Data base Connectivity.

MALLA REDDY COLLEGE OF ENGINEERING AND TECHNOLOGY

III Year B.TECH–I-SEM **L/T/P/C**

-/0/2/1

(R22A1283) WEB APPLICATION DEVELOPMENT LAB

COURSE OBJECTIVES:

1. The student should be able:
2. To study the insights of HTML, and XML usage
3. To gain understanding regarding the use of Tomcat Server
4. To get an idea about the working of Servlets and JSP

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.
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.
4) REGISTRATION PAGE

2. Develop and demonstrate **PHP** Script for the following problems:

a) **Write a PHP Program to display current Date, Time and Day using PHP Script**
b) Write a PHP Script to check whether the given number is Palindrome or not

3. Write an **XML** file to display the Book information which includes the following:

a) Title of the book b) Author Name c) ISBN number
d) Publisher name e) Edition f) Price

4.Design an **XML** document to store information about a student in an engineering College affiliated toJNTU

5. SERVLETS:

1. Write a program to generate a plain text.
2. Write a program to display cookie id.

6. JDBC:

1. Write a program to select a query using JDBC.
2. Write a program to update customer information using JDBC

7. JAVA SERVER PAGES:

1. Write a program to represent basic arithmetic functions.
2. Write a program to display a string.
3. Write a program to create checkboxes.

COURSE OUTCOMES:

1. Using XML Scripting display the college details.
2. Use Tomcat Server for Servlets and JSPs
3. Write simple applications with Technologies like HTML, PHP
4. Servlets and JSPs Connect to Database and get results

INDEX

WEEK 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**.
2) **LOGIN PAGE**
3) **CATOLOGUE PAGE:** The catalogue page should contain the details of all the books availablein the web site in a table.
4) **REGISTRATION PAGE**

Aim: Design the following static web pages required for online book store.

1. **Home page:-** the static home page must contains three pages
2. **Top frame:-** logo and college name and links to homepage, login page, registration page andcatalogue 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 paged are created by using basic HTML tags. Home page 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, theability to resize, etc.

PROGRAM:

home.html:

```
<frameset rows="40%,*">
        <frame src="top.html" noresize scrolling="NO" name="topframe">
<frameset cols="15%,*">
        <frame src="left.html" noresize scrolling="NO" name="leftframe">
        <frame src="right.html" noresize name="rightframe" scrolling="auto">
</frameset>
</frameset>
```

top.html:

```
<html>
  <head>
     <title>Top Frame</title>
</head>
 <body bgcolor="YellowGreen ">
     <img src="images/logo1.png" width="125" height="115" align="left">
     <img src="images/cse.png" width="125" height="115" align="right">
  <center>
    <marquee bgcolor="yellow" width="650" behavior="alternate">
   <font face="Brush Script MT" size="8" color="green"><b><i>Online Book Store</i></b>
       </font>
    </marquee> <br>
<font face="Brush Script" size="6" color="white"><b>Created & Maintained By MRCET</b></font>
  </center>
<br>
<table width="100%" height="50%" cellspacing=10>
<tr align="center">
        <td>  <a href="Home.html" target="_parent"><font face="Brush Script" size="6" color="navy">HOME </a> </td>
        <td> <a href="login.html" target="rightframe"><font face="Brush Script" 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"> <font face="Brush Script" size="6" color="navy">CATALOGUE</a> </td>
   </tr>
  </table>
 </body>
</html>
```

left.html:

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

right.html:

```
<html>
  <body bgcolor="orange">
   <center>
    <img src="images/Books.jpg" height="170"><br>
     <font face="Brush Script MT" size="5" color="blue">
       <h1><b>Welcome to the Online Book Store!!!</b></font><br />
     <font face="Brush Script MT" size="5" color="red">

<h2><b> "A Huge Collection Of Engineering E-Books"</b></h2></font>
   </center>
  </body>
</html>
```

cse.html:

```
<html>
<body bgcolor="Plum">
<h1><font color="blue">COMPUTER SCIENCE ENGINEERING </font></h1>
<h2>
<ul type="square">
<li>Data Structures using Python </li>
<li>Web Technologies</li>
<li>Linux Programming</li>
<li>Artificial Intelligence</li>
</ul>
</h2>
</body>
</html>
```

ece.html:

```
<html>
    <body bgcolor="Plum">
        <h1><font color="blue">Electronics and Communication Engineering</font></h1>
<h2>
        <ul>
    <li>Digital Circuits</li> <li>Signals and Systems</li>  <li>Digital Communication</li>
        </ul>
        </h2>
    </body>
</html>
```

it.html:

```
<html>
    <head><title></title></head>
 <bodybgcolor="cyan">
 <center><fontcolor="blue"><h1>INFORMATION TECHNOLOGY</h1></font></center>
<br>
   <tablealign="center">
    <tr>
        <td>Text Books</td>
        <td>
        <select>
            <option value="select thebook"selected>Selectthebook
            <optionvalue="C&Ds">C&Ds
            <optionvalue="Ads">Ads
            <optionvalue="Java">Java
            <optionvalue="Oracle">Oracle
            <optionvalue="MsSQLServer">MsSQLServer
            <optionvalue="MySql">MySql
        </select>
         </td></tr>
    <tr>
        <td>Quantity</td>
        <td><inputtype="text" id="q"></td>
    </tr>
    <tr>
        <td></td>
        <td>
            <formmethod=postaction="order.html">
                <inputtype="submit" value=ok/>
            </form>
        </td>
     </tr>
   </table>
   <center>
     <pre>Cost ofone bookis"500"+shipping "100"</pre>
   </center>
  </body>
</html>
```

mech.html:

```
<html>
   <body bgcolor="Plum">

      <h1><font color="blue">Electronics and Communication Engineering</font></h1>
       <h2>
<ol type="I">

                  <li>Theory of Machines</li>
                  <li>Automation and Robotics</li>
                  <li>Engineering Fluid Mechanics</li>
          </ol>
        </h2>
      </body>
</html>
```

catalogue.html:

```
<html>
  <head>
     <title> Catalogue </title>
   </head>
<body bgcolor="pink">
  <form action="order.html">
 <table border="1" width="100%">
     <tr>
       <td>
         <img src="images/wt.jpg" width=100 height=100/>
       </td>
       <td> Book: Web Technologies <br> Author: Uttam K. Roy <br> Publication:Oxford
  University Press</td> <td>531     </td>
       <td> <input type="submit" value="Add to cart"/></td> </tr>
     <tr>
       <td> <img src="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     </td>
       <td> <input type="submit" value="Add to cart"/></td> </tr>
</table> </form>
</body> </html>
```

login.html:

```
<html>
 <body bg color="pink">
  <basefont face="Cambria" size="4"> <br>
  <center>
   <img src="images/login.jpg" width="385" height="135" /><br />
    <font face="Brush Script MT" size="7" color="purple">
      <b>Enter Login Details:</b>
    </font>
  </center>
  <form name="f1" method="post" action="right.html">
   <table align="center" width="100" height="150" cellspacing=”15”>
    <tr><td><b>Login ID:</b></td>
       <td><input type="text" name="t1"></td>
    </tr>
    <tr>
       <td><b>Password:</b></td>
       <td><input type="password" name="t2"></td>
    </tr>
    <tr align="center">
       <td><input type="submit" name="b1" value="Submit"></td>
       <td><input type="reset" name="b2" value="Reset"></td>
    </tr>
  </table>   </form>   </basefont>  </body>   </html>
```

registration.html:

```
<html>
<head><title>Registration Form</title></head>
<body bgcolor="#E4F0F8">
<center><font color="blue" size="6" face="arial">Registration Form</font></center><br />
<form action="right.html">
    First Name(Minimum 6 characters)<font color="red">* </font>
      <input type='text'  id='firstname' /><br /><br />
    Last Name<font color="red"><font color="red">* </font> </font>    
      <input type='text' id='lastname' /><br /><br />
    EmailAddress<font color="red">* </font>    
      <input type='text' id='email' /><br />
  <font color="red">(one e-mail id only):</font>    
  <font color="redblue">e.g. smith@hotmail.com</font><br /><br/>
Password(minimum 6 characters)<font color="red">* </font>    
       <input type='password' id='pass'><br /><br/>
    Address<font color="red">* </font>    
```

```
      <textarea rows="2" cols="20" id='addr' /></textarea> <br /> <br/>
    Mobile No<font color="red">* </font>    
      <input type='text' id='mobileno' /><br />
    Gender: <input type='radio' name="gender">male
            <input type='radio' name="gender">female<br/><br />
      <input type='Submit' value='submit' />
      <input type='Reset' value='reset' />
</form>      </body>          </html>
```

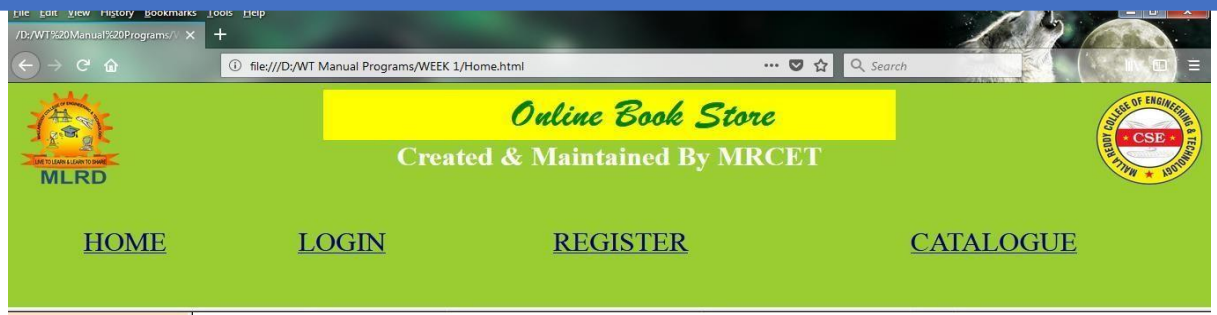
order.html:

```
<html>
  <head><title>order conformation</title></head>
    <body bgcolor="cyan">
      <center>
        <pre><strong>
        <b>Your order Is Conformed
        </strong></pre>
        <h2><b>THANK YOU...Visit  Again</h2>
      </center>
    </body>
</html>
```

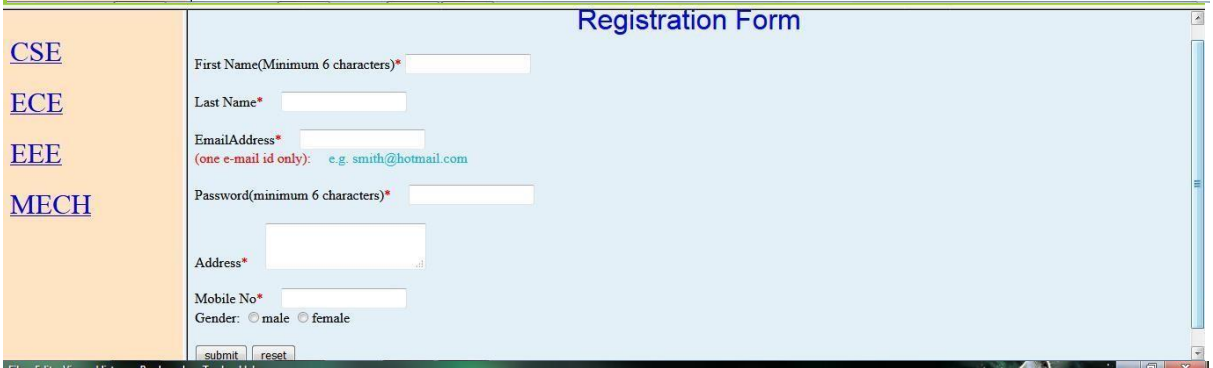
OUTPUT:

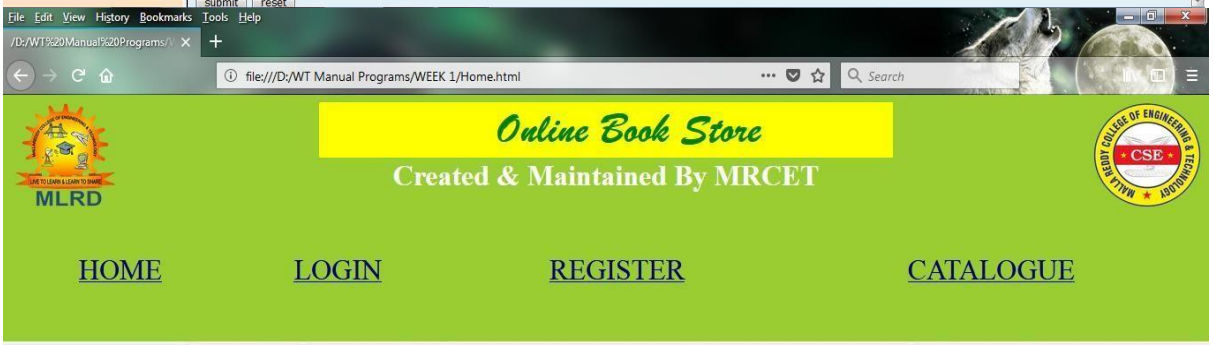

WT NOTES AND LAB MANUALS
Microsoft Word - liub-SA-and-O
home.html
File | D://ROOPA/MRCET/WebTechLab/home.html
Apps
Faculty Login
Reading list
Online Book Store
Created & Maintained ByMRCET
HOME
LOGIN
REGISTER
CATALOGUE
CSE
ECE
IT
MECH
Welcome to the OnlineBookStore!!!
"A Huge Collection Of Engineering E-Books"

v


Online Book Store
Created & Maintained By MRCET
MLRD
CSE
HOME
LOGIN
REGISTER
CATALOGUE


CSE
ECE
EEE
MECH
LOGIN
Enter Login Details:
Login ID:
Password:
Submit
Reset


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
submit
reset

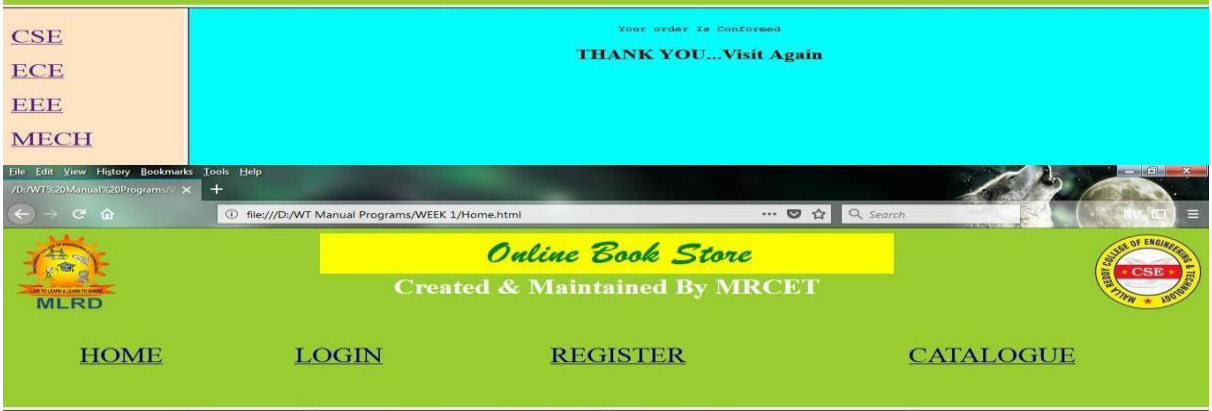

Online Book Store
Created & Maintained By MRCET
MLRD
CSE
HOME
LOGIN
REGISTER
CATALOGUE


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
Online Book Store
Created & Maintained By MRCET
MLRD
HOME
LOGIN
REGISTER
CATALOGUE


CSE
ECE
EEE
MECH
Computer Science and Engineering
Text Books
Web Technologies
Quantity
2
ok
Cost of one book is"500" + shipping "100"

file:///D:/WT Manual Programs/WEEK 1/Home.html
Online Book Store
Created & Maintained By MRCET
MLRD
HOME
LOGIN
REGISTER
CATALOGUE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file:///D:/WT Manual Programs/WEEK 1/Home.html
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CSE
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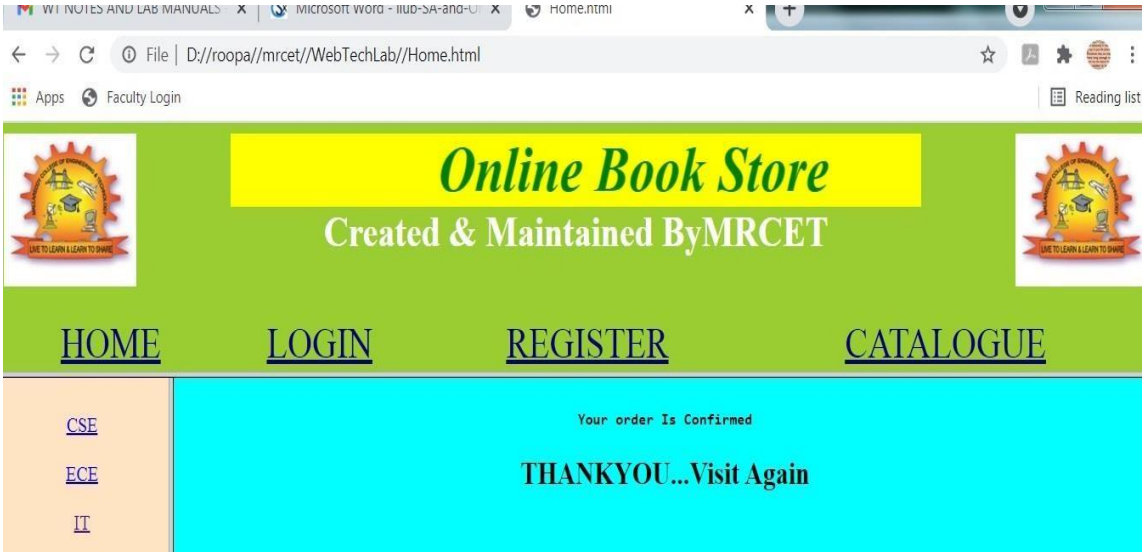
MLRD
HOME
LOGIN
REGISTER
CATALOGUE


CSE
ECE
EEE
MECH
Electrical and Electronics Engineering
Concepts in Electric Circuits
Introduction to Electronic Engineering
Electrical Power


Home.html
File | D://roopa//mrcet//WebTechLab//Home.html
Apps
Faculty Login
Reading list
Online Book Store
Created & Maintained ByMRCET
HOME
LOGIN
REGISTER
CATALOGUE
CSE
ECE
IT
Your order Is Confirmed
THANKYOU...Visit Again

WEEK - 2: Develop and demonstrate PHP Script for the following problems:

(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

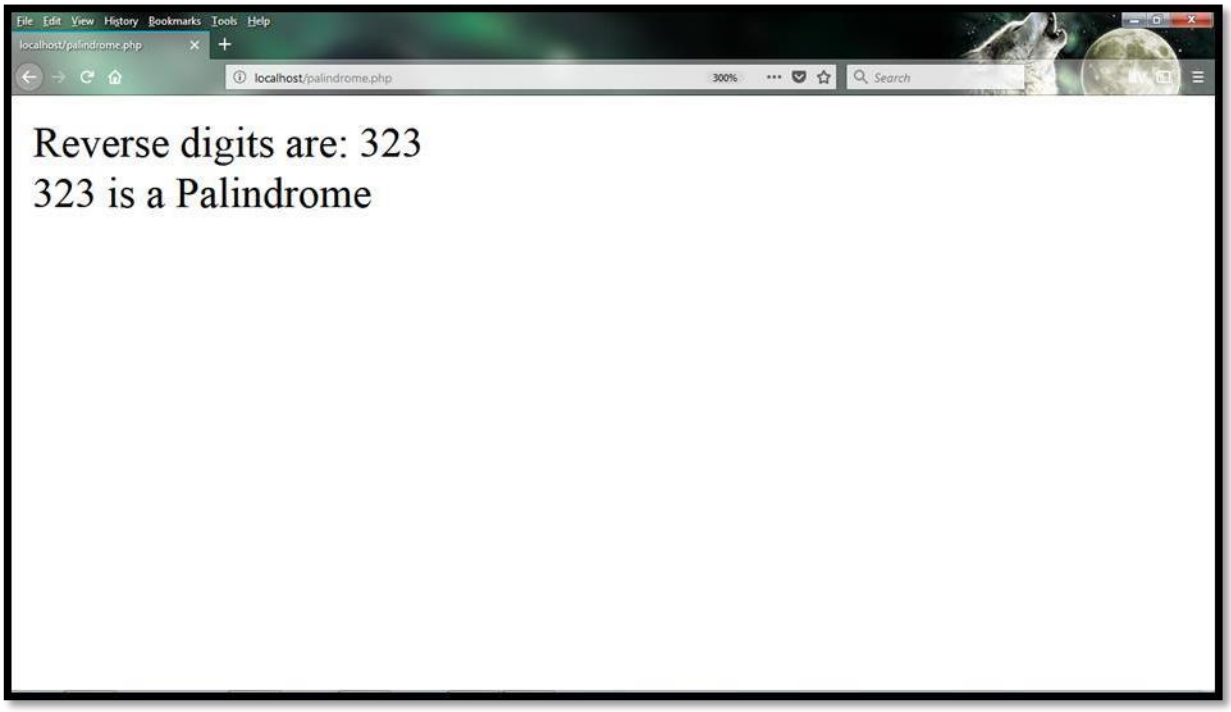
```
<?p
 hp
   date_default_timezone_set
   ("Asia/Calcutta");echo "Date: ";
   echo date("d/m/y");
   echo "<br> Time: ";
   echo date(" H:i:s A",
   time());echo "<br> Day:
   ";
   $day=date("l
   ");echo
   $day;
?>
```

Output:

(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 "Reverse digits are: $rev <br>";

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

Output:



WEEK 3: Write an XML file to 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

Save as **catalog1.xml**

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/css" href="s.css"?>
 <catalog>
       <book>
           <title>Head First Java Script</title>
           <author>Author:Kathy Sierra and Bert Bates</author>
           <isbn>ISBN:1148574</isbn>
           <publisher>Publisher:O'Reilly Media</publisher>
           <edition>Edition:Second</edition>
           <price>Price:375</price>
      </book>
      <book>
          <title>Head First Servlets</title>
          <author>Author:Bryan Basham, Kathy Sierra and Bert Bates</author>
          <isbn>ISBN:58746321</isbn>
          <publisher>Publisher:O'Reilly Media</publisher>
          <edition>Edition:Third</edition>
          <price>Price:475</price>
      </book>
      <book>
          <title>Head First PHP &amp;amp; MYSQL</title>
          <author>Author:Lynn Beighley Michael Morrison</author>
          <isbn>ISBN:965844712</isbn>
          <publisher>Publisher:O'Reilly Media</publisher>
          <edition>Edition:First</edition>
          <price>Price:365</price>
     </book>
     <book>
         <title>Head First WebDesign</title>
         <author>Author:Ethan Watrall </author>
         <isbn>ISBN:764485142</isbn>
         <publisher>Publisher:O'Reilly Media</publisher>
         <edition>Edition:First</edition>
         <price>Price:390</price>
      </book>
 </catalog>
```

S.CSS:

```
*{
display: block; font-size: 20px;
}
title {
color: blue;

font-size: 30px;
margin-top: 20px;
}
author {
color:red  }
```

Output:

WEEK 4:

Design an XML document to store information about a student in an engineering collegeaffiliated to JNTU.

File1.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/css" href="p.css"?>


<STUDENTDATA>
        <STUDENT>
                    <USN>USN : 3GN16CS002</USN>
                   <NAME>NAME : ABHISHEK MALI</NAME>
                   <COLLEGE>COLLEGE : GNDECB</COLLEGE>
                   <BRANCH>BRANCH :IT</BRANCH>
                    <YEAR>YEAR : 2023</YEAR>
                   <EMAIL>E-MAIL : abhishek@gmail.com</EMAIL>
      </STUDENT>
      <STUDENT>
                  <USN>USN : 3GN16CS029</USN>
                  <NAME>NAME : KESHAV POLA</NAME>
                  <COLLEGE>COLLEGE : GNDECB</COLLEGE>
                  <BRANCH>BRANCH :IT</BRANCH>
                  <YEAR>YEAR : 2023</YEAR>
                  <EMAIL>E-MAIL : keshav@gmail.com</EMAIL>
        </STUDENT>
        <STUDENT>
             <USN>USN : 3GN16CS027</USN>
             <NAME>NAME : KARAN DANGE</NAME>
            <COLLEGE>COLLEGE : GNDECB</COLLEGE>
             <BRANCH>BRANCH :IT</BRANCH>
            <YEAR>YEAR : 2023</YEAR>
            <EMAIL>E-MAIL : karan@gmail.com</EMAIL>
     </STUDENT>
  </STUDENTDATA>
```

File name: p.css

```
*{
display: block; font-size: 20px;
}
USN {
color: blue;
font-size:
30px;
margin-top: 20px;
}
```

OUTPUT:

USN : 3GN16CS002
NAME : ABHISHEK
MALICOLLEGE :
GNDECB BRANCH: IT
YEAR: 2023
E-MAIL:abhishek@gmail.com

USN : 3GN16CS029
NAME: KESHAV
POLACOLLEGE:
GNDECB BRANCH:
IT YEAR: 2023
E-MAIL : keshav@gmail.com

USN : 3GN16CS027
NAME : KARAN
DANGECOLLEGE :
GNDECB BRANCH:
IT
YEAR: 2023
E-MAIL: karan@gmail.com

WEEK 5: JDBC:

A. **Write a program to select a query using JDBC.**

B. **Write a program to update customer information using JDBC.**

A. Write a program to select a query using JDBC.

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>Welcome to MRCET</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";
ResultSetrs = stmt.executeQuery(sql);
while(rs.next()){
```

```
out.println("ID: " + rs.getString(1));

out.println("Age: " + rs.getString(2));
out.println("First Name: " + rs.getString(3)+"<br>");
}
rs.close();
stmt.close();
conn.close();
}catch(SQLException se){
out.println(se.getMessage());
}catch(Exception e){
out.println(e.getMessage());
}
out.println("</body></html>");
}
}
```

web.xml:

```
<?xml version="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:


Welcome to MRCET
ID: 100 Age: 18 First Name: aaa
ID: 101 Age: 24 First Name: bbb
ID: 102 Age: 42 First Name: ccc

WEEK 5:

B.Write a program to update customer information using JDBC.

insert.html:

```
<!DOCTYPE html>
<html>
    <head>
        <title>Insert Data</title>
    </head>
<body>
     <!-- Give Servlet reference to the form as an instances
     GET and POST services can be according to the problem statement-->
<form action="./InsertData" method="post">
  <p>ID:</p>
     <!-- Create an element with mandatory name attribute,
       so that data can be transfer to the servlet using getParameter() -->
 <input type="text" name="id"/>
<br/>
<p>String:</p>
<input type="text" name="string"/>
<br/><br/><br/>
<input type="submit"/>
</form>
</body>
</html>
```

DatabaseConnection.java:

```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;
// This class can be used to initialize the database connection
public class DatabaseConnection {
```

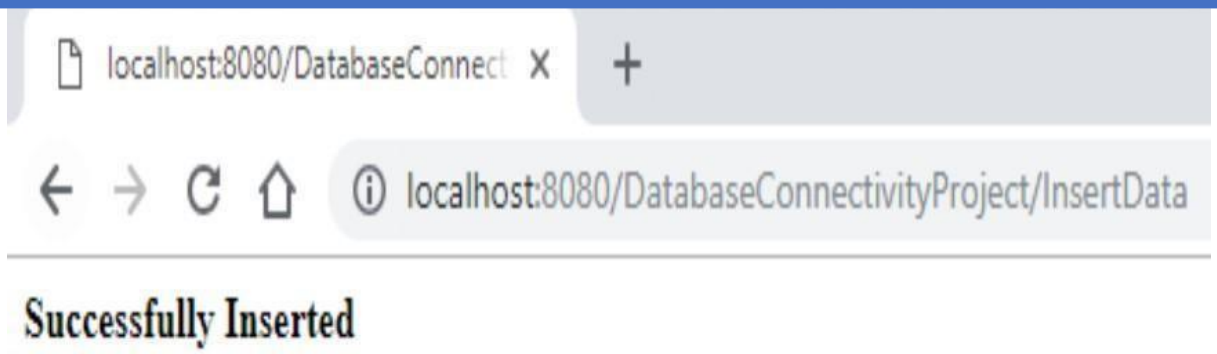
```
    protected static Connection initializeDatabase()
    throws SQLException, ClassNotFoundException
   {
      String dbDriver = "com.mysql.jdbc.Driver";
      String dbURL = "jdbc:mysql:// localhost:3306/";
      String dbName = "demoprj";
      String dbUsername = "root";
      String dbPassword = "root";

Class.forName(dbDriver);
Connection con =DriverManager.getConnection(dbURL+dbName,dbUsername,dbPassword);
      return con;
   }
}
```

InsertData .java:

```
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.PreparedStatement;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
// Import Database Connection Class file
import code.DatabaseConnection;
@WebServlet("/InsertData")
public class InsertData extends HttpServlet {
private static final long serialVersionUID = 1L;
protected void doPost(HttpServletRequestrequest,HttpServletResponse response) throws
```

```
ServletException, IOException
    {
        try {
        String jdbcUrl = "jdbc:mysql://localhost:3306/BORAJI";String username = "root";
    String password = "admin";
    String sql = "update customer set name='Michael Sam' where cus_id=1";


    try (Connection conn = DriverManager.getConnection(jdbcUrl, username, password);
        Statement stmt = conn.createStatement();) {
stmt.executeUpdate(sql);
System.out.println("Database updated successfully ");
PrintWriter out = response.getWriter();
out.println("<html><body><b>Successfully Inserted"
                    + "</b></body></html>");
        }
        catch (Exception e) {
e.printStackTrace();
        }
    }
}
```

OUTPUT:



Successfully Inserted

WEEK: 6 SERVLETS:

A. **Write a program to generate a plain text.**

B. **Write a program to display cookie id.**

Implement the following web applications using Servlets.

A. Write a program to generate a plain text.

Filename:greet.html

```
<html>
  <body bgcolor="yellow">
     <center>
     <h1>USER NAME ENTRY SCREEN</h1>
     <form action="greet">
         USERNAME <input type="text" name="t1">
         <br><br>
        <input type="submit" value="Submit">
     </form>
    </center>
  </body>
 </html>
```

File Name:GreetingServlet.java

```
import javax.servlet.*;
import java.io.*;
public class GreetingServlet extends GenericServlet
{
   public void service(ServletRequest req, ServletResponse res) throws
   ServletException,IOException
    {
            String
            name=req.getParameter("t1");
            res.setContentType("text/html");
            PrintWriter pw=res.getWriter();
            pw.println("<html>");
            pw.println("<body
            bgcolor=white>");
            pw.println("<h1>HELLO"+name+"WELCOME TO OUR WEBSITE</h1>");
            pw.println("</bod
            y>");
            pw.println("</ht
            ml>");
            pw.close();}     }
```

web.xml

```
<?xml version="1.0"?>
<web-app>
        <servlet>
                <servlet-name>one</servlet-name>
                <servlet-class>GreetingServlet</servlet-class>
        </servlet>
        <servlet-mapping>
                <servlet-name>one</servlet-name>
                <url-pattern>/greet</url-pattern>
        </servlet-mapping>
 </web-app>
```

OUTPUT:

WEEK 6:

B.Write a program to display cookie id.

index.html

```
<html>
  <body bgcolor="pink">
   <form action="servlet1">
     <center>
         NAME <input type="text" name="username"/><br><br>
        <input type="submit" value="submit"/>
     </center>
   </form>
  </body>
</html>
```

FirstServlet.java

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class FirstServlet extends HttpServlet
 {
  public void doPost(HttpServletRequest request, HttpServletResponse
 response){
try{
response.setContentType("text/html");
PrintWriter out response.getWriter();
String n=request.getParameter("userName");
out.print("Welcome"+n);
Cookie ck=new Cookie("uname",n);
    //creating cookie object
response.addCookie(ck);
      //adding cookie in the response
     //creating submit button
out.print("<form action='servlet2'>");
out.print ("<input type='submit' value='go'>");
out.print("</form>");
```

```
out.close();
            }
         catch(Exception e)
        {
System.out.println(e);
        }
  }}
```

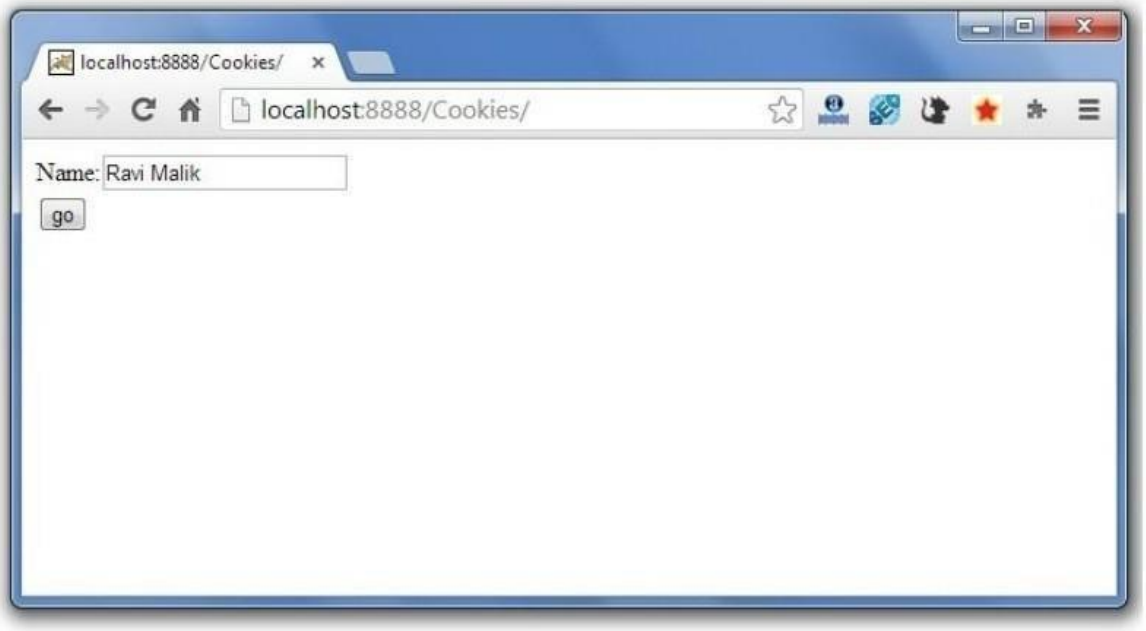
SecondServlet.java

```
import java.io.*;

import javax.servlet.*;

import javax.servlet.http.*;
public class SecondServlet extends HttpServlet {

public void doPost(HttpServletRequet

request, HttpServletResponse response)

{  try{

    response.setContentType("text/html");

    PrintWriter out=response.getWriter();

    Cookie ck[]=request.getCookies();

    out.print("Hello"+ck[0].getValue());

    out.close();

  }

catch(Exception e)

{  System.out.println(e);

}}}
```

web.xml

```
<?xml version="1.0"?>
<web-app>
  <servlet>
        <servlet-name>s1</servlet-name>
        <servlet-class>FirstServlet</servlet-class>
  </servlet>
  <servlet-mapping>
        <servlet-name>s1</servlet-name>
        <url-pattern>/servlet1</url-pattern>
  </servlet-mapping>
  <servlet>
        <servlet-name>s2</servlet-name>
        <servlet-class>SecondServlet</servlet-class>
  </servlet>
  <servlet-mapping>
        <servlet-name>s2</servlet-name>
        <url-pattern>/servlet2</url-pattern>
  </servlet-mapping>
</web-app>
```

OUTPUT:


localhost:8888/Cookies/
localhost:8888/Cookies/
Name: Ravi Malik
go


localhost:8888/Cookies/se
localhost:8888/Cookies/servlet1
Welcome Ravi Malik
go


localhost:8888/Cookies/se
localhost:8888/Cookies/servlet2
Hello Ravi Malik

WEEK 7: JAVA SERVER PAGES:

A. Write a program to represent basic arithmetic functions.

B. Write a program to display a string.

C. Write a program to create check boxes.

WEEK 5:

A. Write a program to represent basic arithmetic functions.

Filename: input.html

```
<html>
  <title>Sample Example </title>
  <body>
    <form method="get" action="index.jsp">
      <fieldset style="width:30%; background-color:#b3d1ff">
        <h2><center> Mathematical Operation</center></h2>
        <hr>
        <font size=5 face="Times New Roman">
          <input type="radio" name="a1" value="add" checked>Addition</input><br>
          <input type="radio" name="a1" value="sub">Subtraction</input><br>
          <input type="radio" name="a1" value="mul" >Multiplication</input><br>
          <input type="radio" name="a1" value="div" >Division</input><br>
        </font>
        <table>
        <tr>
          <td>Enter first Value:</td>
          <td> <input type="text" name="t1" value=""></td>
        </tr>
        <tr>
          <td>Enter second Value: </td>
          <td><input type="text" name="t2" value=""></td>
```

```
            </tr><br>
            <tr><td></td>
              <td><input type="submit" name="result" value="Check result!"></td>
            </tr>
            </table>
          </fieldset>
        </form>
      </body>
    </html>
```

```
<%@ page errorPage="error.jsp" %>
<html>
  <body>
    <H1><center>Result for <%=request.getParameter("a1")%></center></H1>
    <%
      String num1=request.getParameter("t1");
      String num2=request.getParameter("t2");

      int i=Integer.parseInt(num1);
      int j=Integer.parseInt(num2);

      int k=0;
      String str=request.getParameter("a1");
      if(str.equals("add"))
        k=i+j;
      if(str.equals("sub"))
        k=i-j;
      if(str.equals("mul"))
        k=i*j;
      if(str.equals("div"))
        k=i/j;
    %>
    Result is: <%=k%>
  </body>
</html>
```

Filename:error.jsp

```
<%@ page isErrorPage="true" %>

        <h3>Sorry an exception occured! </h3>Exception is: <%= exception %>
```

Web.xml

```
<?xml version="1.0"?>

<web-app>
   <servlet>

            <servlet-name>s1</servlet-name>

            <servlet-class>FirstServlet</servlet-class>

   </servlet>


  <servlet-mapping>

             <servlet-name>s1</servlet-name>

             <url-pattern>/servlet1</url-pattern>

  </servlet-mapping>


 <servlet>

            <servlet-name>s2</servlet-name>

            <servlet-class>SecondServlet</servlet-class>

 </servlet>


<servlet-mapping>

            <servlet-name>s2</servlet-name>

            <url-pattern>/servlet2</url-pattern>

   </servlet-mapping>

</web-app>
```

OUTPUT:

WEEK 7:

B.Write a program to display a string.

Filename:index1.html

```
<html>
   <body bgcolor="gray">
         <form action="display1.jsp">
               <center>
                  <h1> welcome </h1><br><br>
                  USERNAME<input type="text" name="uname">
                  <br><br>
                  <input type="submit" value="go"><br/>
               </center>
         </form>
   </body>
</html>
```

display1.jsp

```
<html>
   <body bgcolor="pink">
         <form>
               <center>
                     <%String name=request.getParameter("uname");
                     out.print("welcome "+name);
                     %>
               </center>
         </form>
   </body>
</html>
```

OUTPUT:

WEEK 7:

C. Write a program to create check boxes.

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1"%>
<html>
   <head>
   <meta http-eqUIv="Content-Type" content="text/html; charset=ISO-8859-1">
   <script type="text/javascript">

   function demo()
{
   for(var i=0; i< document.form1.subject.length; i++)
   {
            if(!document.f.subject[i].checked)
            {
            alert("Please Select Your
            options");return false;
            }
   else
            {
            alert("Click Submit to Know your choices");

            return true;
            }
     }
   }
 </script>
   <title>Sample</title>
</head>
  <body>
    <form name="f" onsubmit="demo()">
    <h3>Please Select your Choices</h3>
```

```
    <p><input type="checkbox" name="subject" value="first"/>first</p>
    <p><input type="checkbox" name="subject" value="second"/>second</p>
    <p><input type="checkbox" name="subject" value="third"/>third</p>
    <p><input type="checkbox" name="subject" value="fourth"/>fourth</p>
    <p><input type="checkbox" name="subject" value="fifth"/>fifth</p>
    <p><input type="submit" value="submit" />
</form>
    <%
    String subject[]= request.getParameterValues("subject");if(subject != null)
                {
    %>
    <h4>You selected options </h4>
    <ul>
    <%
       for(int i=0; i<subject.length; i++)
       {
    %>
    <li><%=subject[i]%></li>
    <%}%>
 </ul>
    <%}%>
  </body>
</html>
```

Filename:Test.html

```
<html>
   <body bgcolor="pink">
      <form action = "check.jsp" method = "POST" >
<center>
         <input type = "checkbox" name = "maths" /> Maths
    <br>
         <input type = "checkbox" name = "physics" /> Physics
<br>
         <input type = "checkbox" name = "chemistry"  /> Chemistry
```

```
<br>
        <input type = "submit" value = "Select Subject" />
</center>
      </form>
   </body>
</html>
```

OUTPUT: