Ex.No: 01	CREATING A WEBPAGE USING IMAGE MAP
Date:	

AIM:

To create a web page using HTML code to show all the related information when the hot spots are clicked in an image map.

ALGORITHM:

1. Start the program.
2. Get the india map image and link it to the package.
3. Fix the hotspots in that image.
4. Map the reference of the hotspots in the image.
5. Mention the derived link.
6. Click the link to get the desired image.
7. Stop the program.

PROGRAM:

Index.html
```
<html>
<head>
<img src ="indiamap.jpg" usemap="#indiamap" />
<map name=indiamap>
<AREA SHAPE="rect" COORDS="453,1438,584,1220" HREF="Tamilnadu.html"
target="Tamilnadu.html" alt="Tamilnadu">
<AREA SHAPE="rect" COORDS="467,1435,356,1242" HREF="Kerala.html"
target="Kerala.html" alt="Kerala">
<AREA SHAPE="rect" COORDS="728,1001,458,1199" HREF="Andhra.html"
target="Andhra.html" alt="Andhra">
<AREA SHAPE="rect" COORDS="484,1025,353,1268" HREF="Karnataka.html"
target="Karnataka.html" alt="Karnataka">
<AREA SHAPE="rect" COORDS="593,897,304,1077" HREF="Maharastra.html"
target="Maharastra.html" alt="Maharastra" >
<AREA SHAPE="rect" COORDS="845,865,636,1056" HREF="Orissa.html"
target="Orissa.html" alt="Orissa">
<AREA SHAPE="rect" COORDS="680,713,351,899" HREF="Madhyapradesh.html"
target="Madhyapradesh.html" alt="Madhya" >
</map>
</head>
</html>
```

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Tamilnadu.html

```html
<html>
<head>
<body bgcolor="Red"/>
<center>it is a TamilNadu,here maximum Tamilan living and capital of tamilnadu is
<h1>Chennai<h1>
<img src ="tamilnadu.jpg" usemap="#indiamap" />
 </center>
</head>
</html>
```

Kerala.html

```html
<html>
<head>
<body bgcolor="White"/>
<center>it is a kerala,here maximum malaiyalees living and capital of kerala is
<h1>Thiruvananthapuram</h1>
<img src ="kerala.jpg" usemap="#indiamap" /> </center>
</head>
</html>
```

Andhra.html

```html
<html>
<head>
<body bgcolor="Orange"/>
<center>it is a andhra,here maximum Telugans living and capital of karnataka is
<h1>Amaravathi</h1>
<img src ="andhra.jpg" usemap="#indiamap" /> </center>
</head>
</html>
```

Karataka.html

```html
<html>
<head>
<body bgcolor="Green"/>
<center>it is a karnataka,here maximum kannadam living and capital of karnataka is
<h1>Bangalore</h1>
<img src ="karnataka.jpg" usemap="#indiamap" /> </center>
</head>
</html>
```
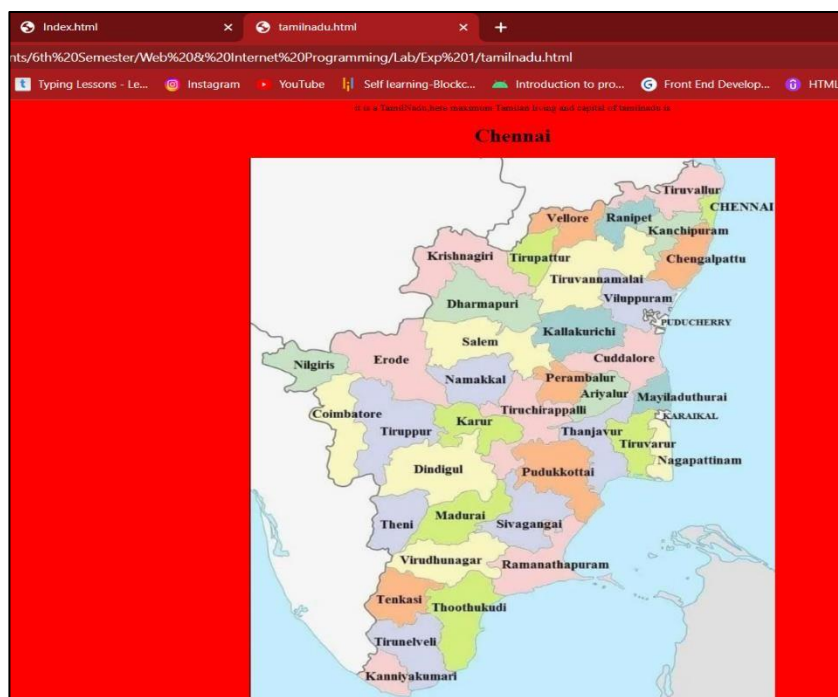
Maharastra.html

```html
<html>
<head>
<body bgcolor="blue"/>
<center>it is a maharashtra,here maximum maratiyam living and capital of maharashtra is
```

OUTPUT:

```
<h1>Mumbai</h1>
<img src ="maharastra.jpg" usemap="#indiamap" /> </center>
</head>
</html>
```

Orissa.html
```
<html>
<head>
<body bgcolor="Violet"/>
<center>
<h2>it is a orissa,here maximum oreya living and capital of orissa is</h2>
<h1>Bhubaneswar</h1>
<img src ="orissa.jpg" usemap="#indiamap" />
</center>
</head>
</html>
```

Madhyapradesh.html
```
<html>
<head>
<body bgcolor="Skyblue"/>
<center>it is a madhyapradesh,here maximum maratiyam living and capital of
madhyapradesh is <h1>Bhopal</h1>
<img src ="madhyapradesh.jpg" usemap="#indiamap" /> </center>
</head>
</html>
```

RESULT:

Thus, the creating of web page using HTML code to show all the related information when the hot spots are clicked in an image map has been successfully executed.

Ex.No: 02-A	CREATION OF WEB PAGE USING EMBEDDED STYLE SHEET
Date:	

AIM:

To create a webpage using following Embedded style sheets using our college information.

ALGORITHM:

1. Start the program.

2. Create a web page with framesets consisting two frames.

3. In the first frame include the links.

4. In the second frameset display the webpage of the link.

5. Create an external style sheets.

6. Create an inline and internal style and make a link to the external style sheet.

7. Stop the program.

PROGRAM:

Embedded.html:

```
<html>
<head>
<title> Embedded style sheet </title>
<style type="text/css">
h1 { font-family:arial;
color:green;
} h2 { font-
family:arial;
color:red;
left:20px; } h3 {
font-family:arial; color:blue;
} p { font-size:14pt;
font-family:verdana;
}
</style>
</head>
<body>
<h1> <center>EMBEDDED STYLE SHEET </center></h1>
<h2> Computer science and Engineering</h2>
<h3> <p>
Computer Science Engineering (CSE) is an engineering discipline that covers several topics
related to computation, programming languages, program design, computer hardware and
software and integrates several fields of computer science. </p>
</h3>
```

OUTPUT:

EMBEDDED STYLE SHEET

Computer science and Engineering

Computer Science Engineering (CSE) is an engineering discipline that covers several topics related to computation, programming languages, program design, computer hardware and software and integrates several fields of computer science.

```
 </body>
</html>
```
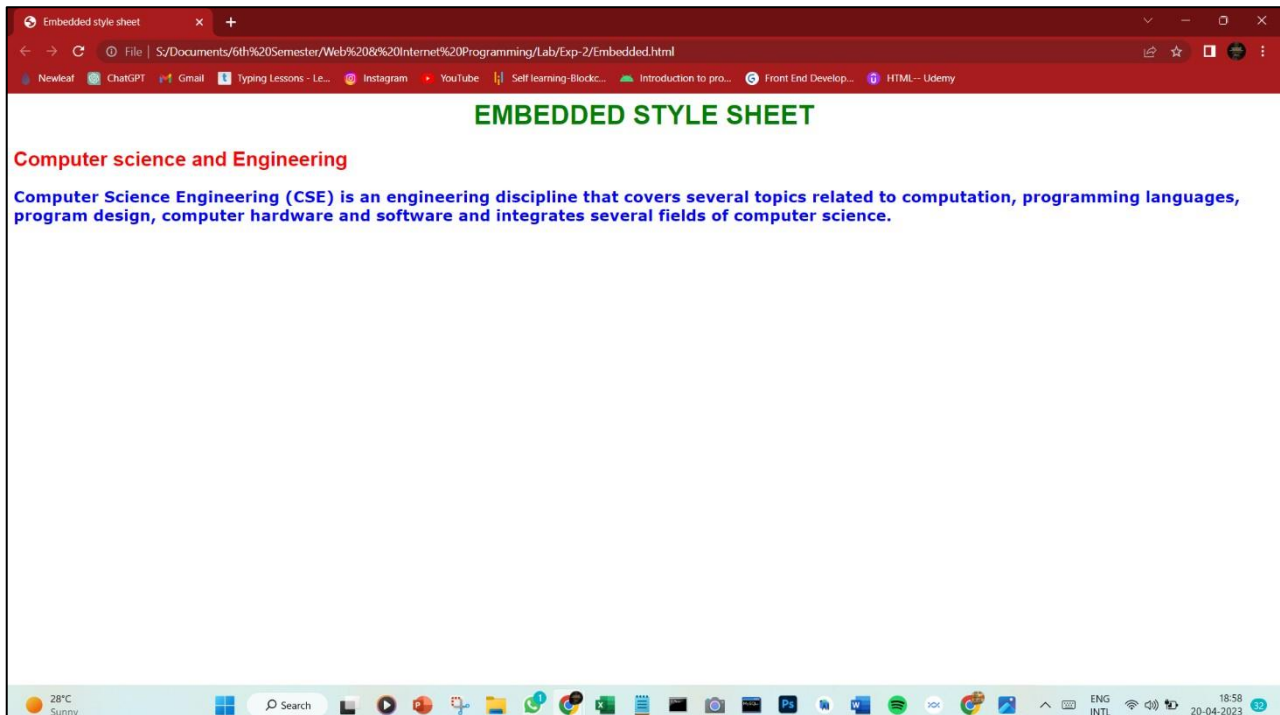
RESULT:

      Thus, the creating of webpage using Embedded style sheets using our college information has been successfully executed.

Ex.No: 02-B	CREATION OF WEB PAGE USING INLINE STYLE SHEET
Date:	

AIM:

   To create a webpage using following Inline style sheets using our college information.

ALGORITHM:

1. Start the program.

2. Create a web page with framesets consisting two frames.

3. In the first frame include the links.

4. In the second frameset display the webpage of the link.

5. Create an external style sheets.

6. Create an inline and internal style and make a link to the external style sheet.

7. Stop the program

PROGRAM:

Inline.html:
```
<html>
<head>
<title>Inline sheet</title>
</head>
<body>
<p style="font-family:Showcard Gothic">Welcome user..</p>
<p style="font-size:40pt;font-family:Microsoft sans serif">Gmail</p>
<p style="font-size:30pt;color:red;font-family:arial">The world's largest spam free Email provider</p>
<p style="font-size:30pt;color:blue;font-family:Kristen ITC">Old user login here...</p>
<h4 style="font-family:Lucida Handwriting">
User Name:<input type="text" value="Enter user name"><br>
Password:<input type="password" value=""><br>
</h4>
<input type="submit" value="login">
<input type="reset"value="cancel"><br><br>
</body>
</html>
```

OUTPUT:
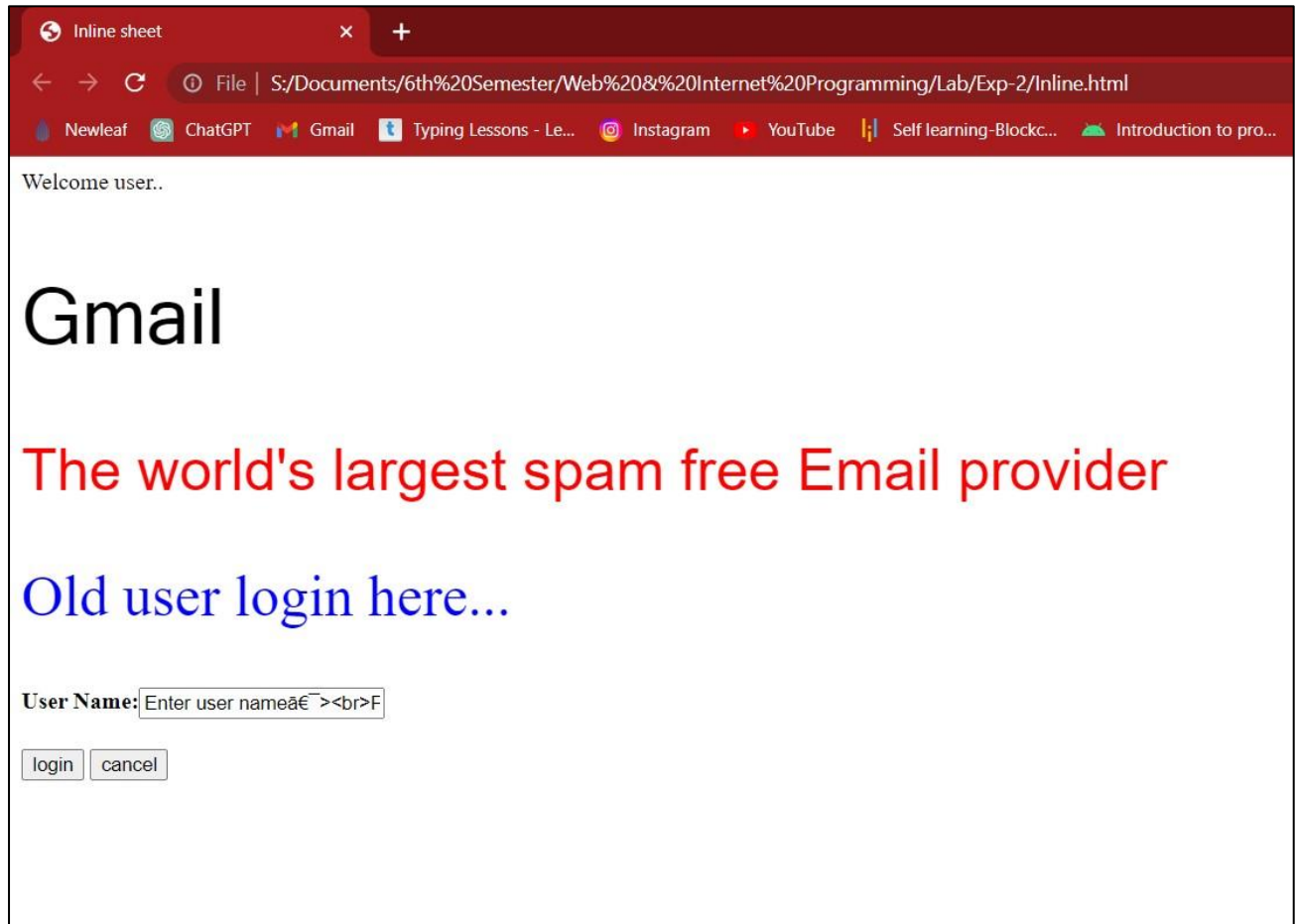
RESULT:

        Thus, the creating of webpage using following Inline style sheets using our college information has been successfully executed.

AIM:

To create a web page using HTML code to validate the Registration, user login, user profile and payment by credit card pages using JavaScript.

ALGORITHM:

1.Start the Program.
2.Create the User Login Page using html.
3.Then provide the registration page foe the new user Login.
4.Create the Credit card details page.
5.Finally create the CSS style sheet for adding alignments.
6.Stop the Program.

PROGRAM:

a) User Login Page:

```
<html>
<head>
<title>Login Page</title>
<script>
function validate_form()
{
var name=document.myform.n.value; var
password=document.myform.p.value;
if(name==null||name==""){ alert("Name
can't be blank"); return false;
}else if(password.length<6){
alert("Password must be at least 6 characters long."); return
false;
} else alert("Login Successfully Welcome
"+name);
}
</script>
</head>
<body align="center" >
<h1> LOGIN PAGE</h1>
<form name="myform" method="post" onsubmit="return validate_form()">
Username: <input type="text" name="n"><br><br>
Password: <input type="password" name="p"><br><br>
<input type="submit" value="Login" >
</form>
</body>
</html>
```

b) Registration and User Profile Page:

```
<html>
<head>
<title>Registration Page</title>
</head>
<body align="center" >
<h1> CREATE YOUR ACCOUNT</h1>
<p><font color="red">* </font>Mandatory Fields</p>
<table cellspacing="2" align="center" cellpadding="8" border="0">
<tr>
<td>First Name:*</td>
<td><input type="text" placeholder="Enter your first name" id="n1"/></td> </tr>
<tr>
<td>Last Name:</td>
<td><input type="text" placeholder="Enter your last name" id="n2"/></td> </tr>
<tr>
<td>Email:*</td>
<td><input type="text" placeholder="Enter your email id" id="e1"/></td> </tr>
<tr>
<tr>
<td>Date of Birth:*</td>
<td><input type="date" name="birthday" /></td>
</tr>
<tr>
<td>Gender:*</td>
<td><select name="gender">
<option value="male">Male</option>
<option value="female">Female</option>
</select>
</tr>
<td>Set Password:*</td>
<td><input type="password" placeholder="Set a password" id="p1"></td>
</tr>
<tr>
<td>Confirm Password:</td>
<td><input type="password" placeholder="Confirm your password" id="p2"></td>
</tr>
<tr><td>
<input type="submit" value="Create" onClick="create_account()"/>
</table>
<script type="text/javascript">   function
create_account(){
var fn=document.getElementById("n1").value; var
ln=document.getElementById("n2").value;   var
e=document.getElementById("e1").value;   var
p=document.getElementById("p1").value;   var
```

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```
cp=document.getElementById("p2").value;
var letters = /^[A-Za-z]+$/;
    var email_val = /^([a-zA-Z0-9_\.\-])+\@(([a-zA-Z0-9\-])+\.)+([a-zA-Z0-9]{2,4})+$/;
if(n1==''||n2==''||e==''||p==''||cp=='')
{
alert("Enter each details correctly");
}
else if(!letters.test(fn))
    {
        alert('Name is incorrect must contain alphabets only');
    }
else if (!email_val.test(e))
    {
        alert('Invalid email format please enter valid email id');
    }
else if(p!=cp)
{
alert("Passwords not matching");
}
else if(document.getElementById("p1").value.length > 12)
{
alert("Password maximum length is 12");
}
else if(document.getElementById("p1").value.length < 6)
{
alert("Password minimum length is 6");
}   else{
alert("Your account has been created successfully");
}
}
</script>
</body>
</html>
```

c) Credit Card Details Page:

```
<html>
<head>
<title>Credit Card Details</title>
<link rel="stylesheet" href="style.css">
<script>
function validateform(){ var
cno=document.myform.cno.value;   var
month=document.myform.Month.value;
var year=document.myform.Year.value;
var cvv=document.myform.cvv.value;
if(cno.length<15)
alert("Card number must be 16 digits"); else
if(cvv.length!=3)
```

```html
        alert("CVV number must be 3 digits");
        }
</script>
</head>
<body>
<form class="credit-card" name="myform" onsubmit=" return validateform()">
<div class="form-header">
<h4 class="title">Credit card detail</h4>
</div>
<div class="form-body">
<input type="text" class="card-number" placeholder="Card Number"name="cno" required>
<div class="date-field">
<div class="month">
<select name="Month" required>
<option value="january">January</option>
<option value="february">February</option>
<option value="march">March</option>
<option value="april">April</option>
<option value="may">May</option>
<option value="june">June</option>
<option value="july">July</option>
<option value="august">August</option>
<option value="september">September</option>
<option value="october">October</option>
<option value="november">November</option>
<option value="december">December</option>
</select>
</div>
<div class="year">
<select name="Year" required>
<option value="2016">2016</option>
<option value="2017">2017</option>
<option value="2018">2018</option>
<option value="2019">2019</option>
<option value="2020">2020</option>
<option value="2021">2021</option>
<option value="2022">2022</option>
<option value="2023">2023</option>
<option value="2024">2024</option>
</select>
</div>
</div>
<div class="card-verification">
<div class="cvv-input">
<input type="text" placeholder="CVV" name="cvv" required>
</div>
<div class="cvv-details">
<p>3 or 4 digits usually found <br> on the signature strip</p>
```

```html
</div>
</div>
<button type="submit" class="proceed-btn"> Proceed</button>
</div>
</form> </body>
</html>
```

style.css
```css
* {
   box-sizing: border-box;
}

body, html {
height: 100%;
min-height: 100%;
}

body {    font-family:
'Roboto',    sans-serif;
margin: 0;    background-
color: #e7e7e7;
}
/* Credit Card */ .credit-
card {    width: 360px;
height: 400px;    margin:
60px auto 0;    border:
1px solid #ddd;    border-
radius: 6px;
background-color: #fff;
   box-shadow: 1px 2px 3px 0 rgba(0,0,0,.10);
}
.form-header {    height: 60px;
padding: 20px 30px 0;    border-
bottom: 1px solid #e1e8ee;
}

.form-body {    height:
340px;    padding: 30px
30px 20px;
}
.card-number,
.cvv-input input,
.month select, .year
select {    font-size:
14px;    font-
weight: 100;    line-
height: 14px;
}
```

```css
.card-number,
.month select, .year
select {    font-size:
14px;    font-
weight: 100;    line-
height: 14px;
}

.card-number,
.cvv-details,
.cvv-input input,
.month select,
.year select {
opacity: .7;
color: #86939e; }
/* Card Number */ .card-
number {    width: 100%;
margin-bottom: 20px;
padding-left: 20px;
border: 2px solid #e1e8ee;
border-radius: 6px; }
/* Date Field */
.month select, .year select {    width:
145px;    margin-bottom: 20px;
padding-left: 20px;    border: 2px solid
#e1e8ee;    border-radius: 6px;
background: url('caret.png') no-repeat;
background-position: 85% 50%;    -
moz-appearance: none;
    -webkit-appearance: none;
}

.month select {
    float: left;
}

.year select {
float: right;
}
/* Card Verification Field */ .cvv-input
input {
    float: left;
width: 145px;
padding-left: 20px;
border: 2px solid
#e1e8ee;    border-
radius: 6px;
background: #fff;
```
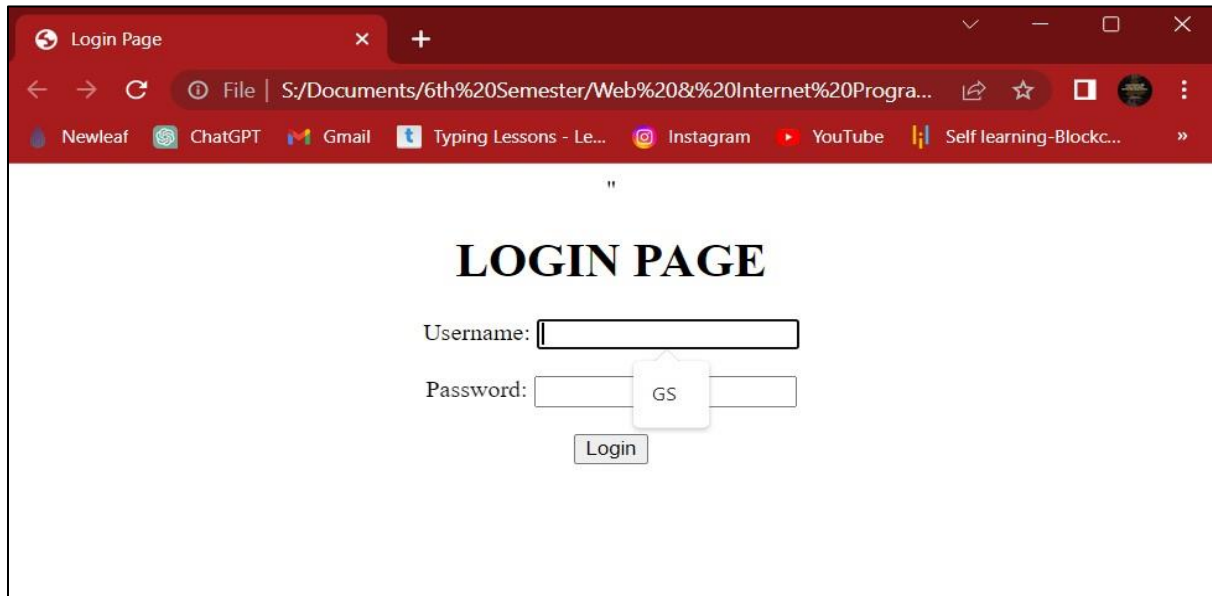
OUTPUT:

```
}

.cvv-details {     font-
size: 12px;     font-
weight: 300;     line-
height: 16px;     float:
right;     margin-bottom:
20px;
}

.cvv-details p {     margin-
top: 6px;
}
```

RESULT:

      Thus, the creating of web page using HTML code to validate the Registration, user login, user profile and payment by credit card pages using JavaScript has been successfully executed.

Ex.No: 04-A	INVOKE SERVLET
Date:	

AIM:

To write a Java program to invoke servlets from HTML forms using Servlets.

ALGORITHM:

1)Start the program.
2)Html code is to create the webpage, where to connect servlet.
3)Servlet file is created with NewServlet name and linked to the form tag in html program.
4)The webpage is executed.
5)Servlet page is invoked by clicking the button in the webpage and the output is verified.
6)Stop the program.

PROGRAM:

index.html
```html
<html>
<head>
<title>Invoking Servlet from HTML</title>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
</head>
<body><form method="get" action="http://localhost:8080/WebApplication2/NewServlet">
<input type="submit" value="Invoke Servlet">
</form>
</body>
</html>
```

NewServlet.java
```java
import jakarta.servlet.ServletException; import
jakarta.servlet.annotation.WebServlet; import
jakarta.servlet.http.HttpServlet; import
jakarta.servlet.http.HttpServletRequest; import
jakarta.servlet.http.HttpServletResponse; import
java.io.IOException; import java.io.PrintWriter;
@WebServlet(urlPatterns = {"/NewServlet"}) public
class NewServlet extends HttpServlet
{
protected void processRequest(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException
{
response.setContentType("text/html;charset=UTF-8");
try (PrintWriter out = response.getWriter())
```

OUTPUT:
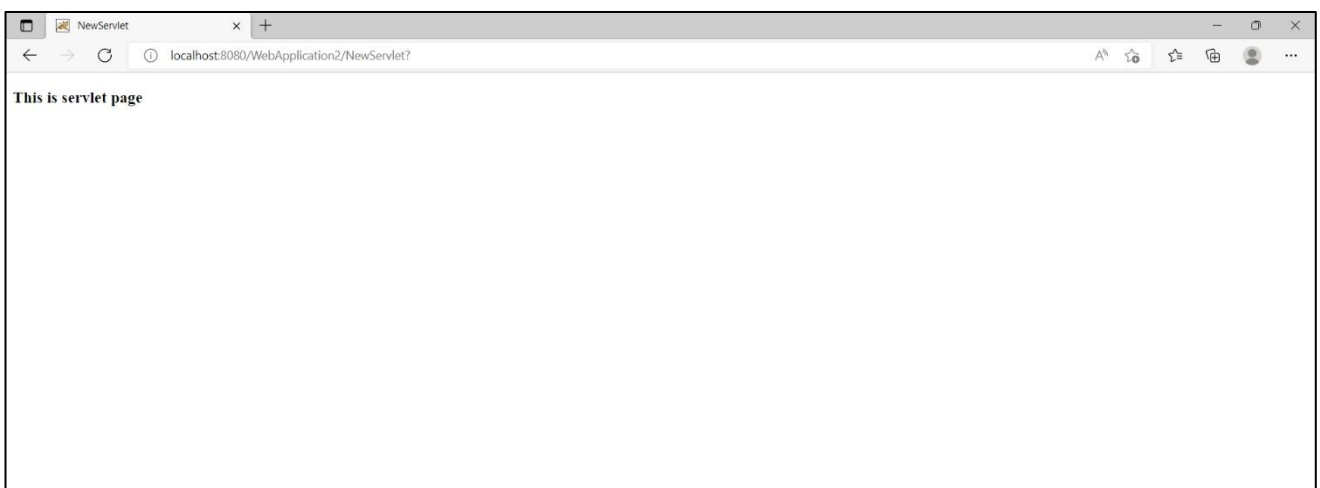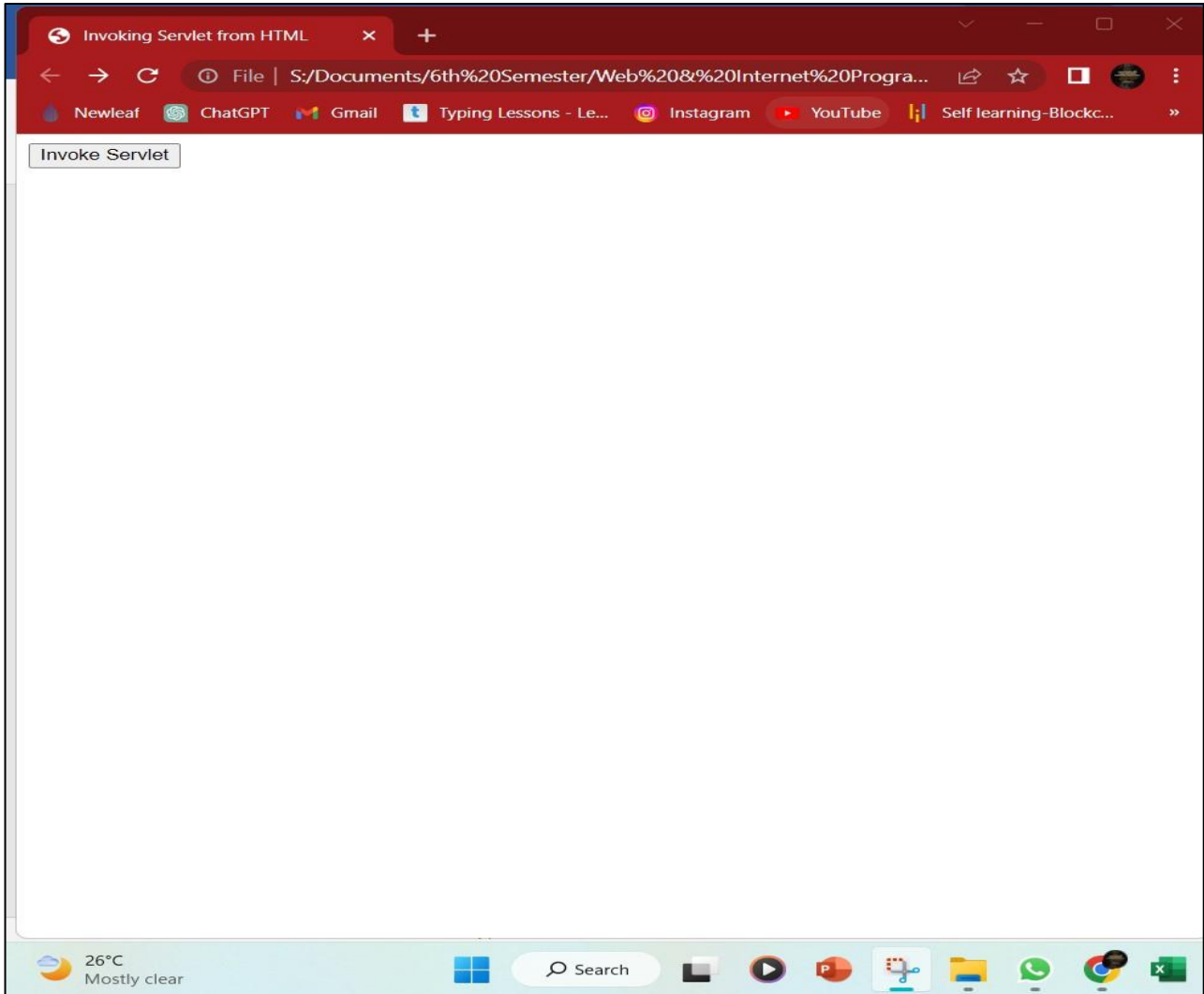
```java
 {
out.println("<!DOCTYPE html>");
out.println("<html>"); out.println("<head>");
out.println("<title>NewServlet</title>");
out.println("</head>"); out.println("<body>");
out.println("<h3>This is servelt page</h3>")   ;
out.println("</body>"); out.println("</html>");
} }
protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException
{
processRequest(request, response);
}

protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException
{
processRequest(request, response);
}
public String getServletInfo()
{
    return "Short description";
}
}
```

RESULT:

        Thus, a Java program to invoke servlets from HTML forms using Servlets is executed successfully.

Ex.No: 04-B	**SESSION TRACKING USING HIDDEN FORM FIELDS**
Date:	

AIM:

To write a Java program using Servlets to perform session tracking using hidden form fields.

ALGORITHM:

1)Start the program.
2)Create a java web application.
3)First html page is created with index.html, where forms are created using form tag.
4)First Java Servlet file is created and linked to html page.
5)Second Java Servlet is created and linked with hidden fields of First Servlet.
6)after saving all the three files. The html file is executed and output is verified.
7)Stop the Program.

PROGRAM:

index.html

```
<html>
<head>
<title>TODO supply a title</title>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
</head>
<body>
<form action="http://localhost:8080/WebApplication1/FirstServlet">
<table>
<tr>
<td>Name</td>
<td><input type="text" name="userName"/></td>
</tr>
<tr>
<td>City</td>
<td><input type="text" name="nameofcity"/></td>
</tr>
</table>
<input type="submit" value="Go"/>
</form>
</body>
</html>
```

FirstServlet.java

```java
import jakarta.servlet.*; import
java.io.*;
@WebServlet(urlPatterns = {"/FirstServlet"}) public
class FirstServlet extends HttpServlet
{
protected void processRequest(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException
{
response.setContentType("text/html;charset=UTF-8");
try (PrintWriter out = response.getWriter())
{
String n=request.getParameter("userName");  String
a=request.getParameter("nameofcity");
out.print("Welcome "+n);
out.print("<form action='http://localhost:8080/WebApplication1/SecondServlet'>");
out.print("<input type='hidden' name='uname' value='"+n+"'>");
out.println("<input type='hidden' name='cname' value='"+a+"'>"); out.print("<input
type='submit' value='Go'>");   out.print("</form>");
out.close();
} }
protected void doGet(HttpServletRequest request, HttpServletResponse response) throws
                    ServletException, IOException {
processRequest(request, response);
}
protected void doPost(HttpServletRequest request, HttpServletResponse response) throws
                    ServletException, IOException {
processRequest(request, response);
} public String
getServletInfo()
{
return "Short description";
}
}
```

SecondServlet.java

```java
import jakarta.servlet.*; import
java.io.*;
@WebServlet(urlPatterns = {"/SecondServlet"}) public
class SecondServlet extends HttpServlet
{
protected void processRequest(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
```
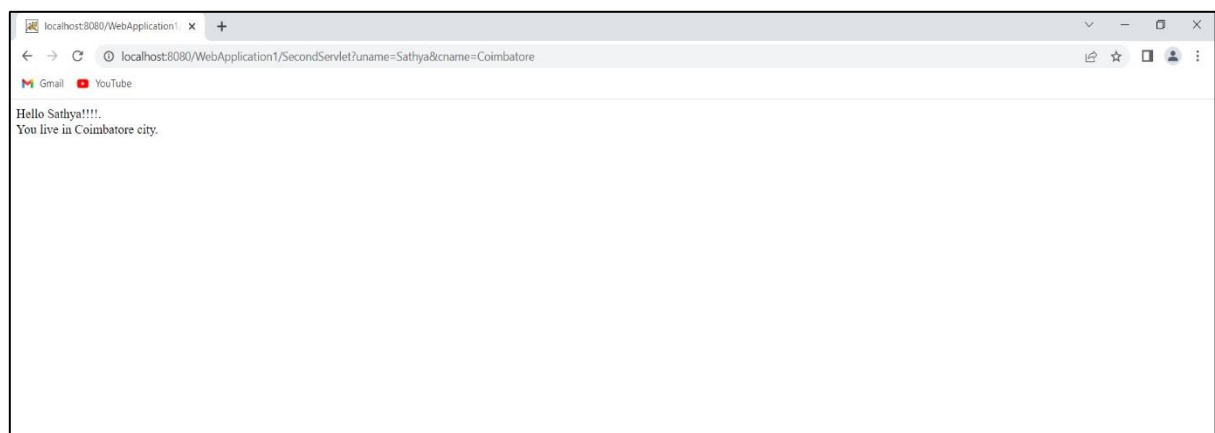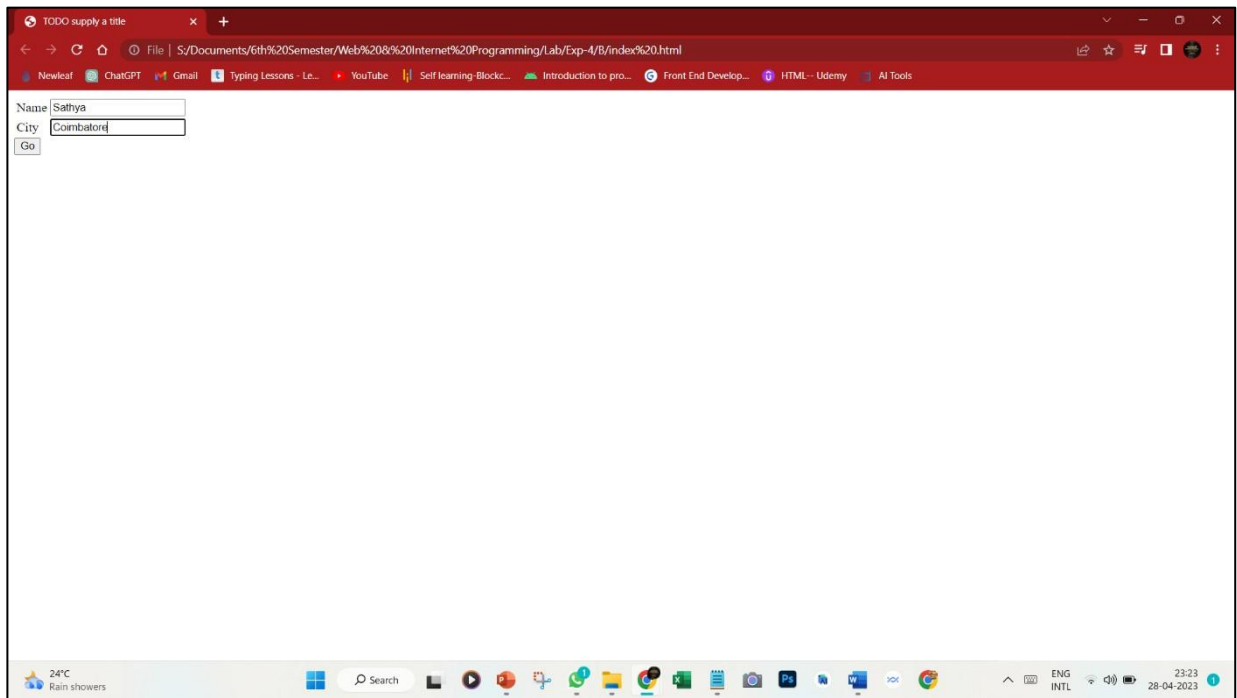
```java
response.setContentType("text/html;charset=UTF-8");
try (PrintWriter out = response.getWriter())  {
String n=request.getParameter("uname");  String
a=request.getParameter("cname");
out.print("Hello "+n+"!!!!."+"<br>");
out.print("You live in "+a+" city.");
out.close();
} }
protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
processRequest(request, response);
}
protected void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
processRequest(request, response);
} public String getServletInfo()
{ return "Short description";
}
}
```

RESULT:

       Thus, a Java program using Servlets to perform session tracking using hidden form fields is successfully verified.

Ex.No: 04-C	**SESSION TRACKING FOR HIT COUNT**
Date:	

AIM:

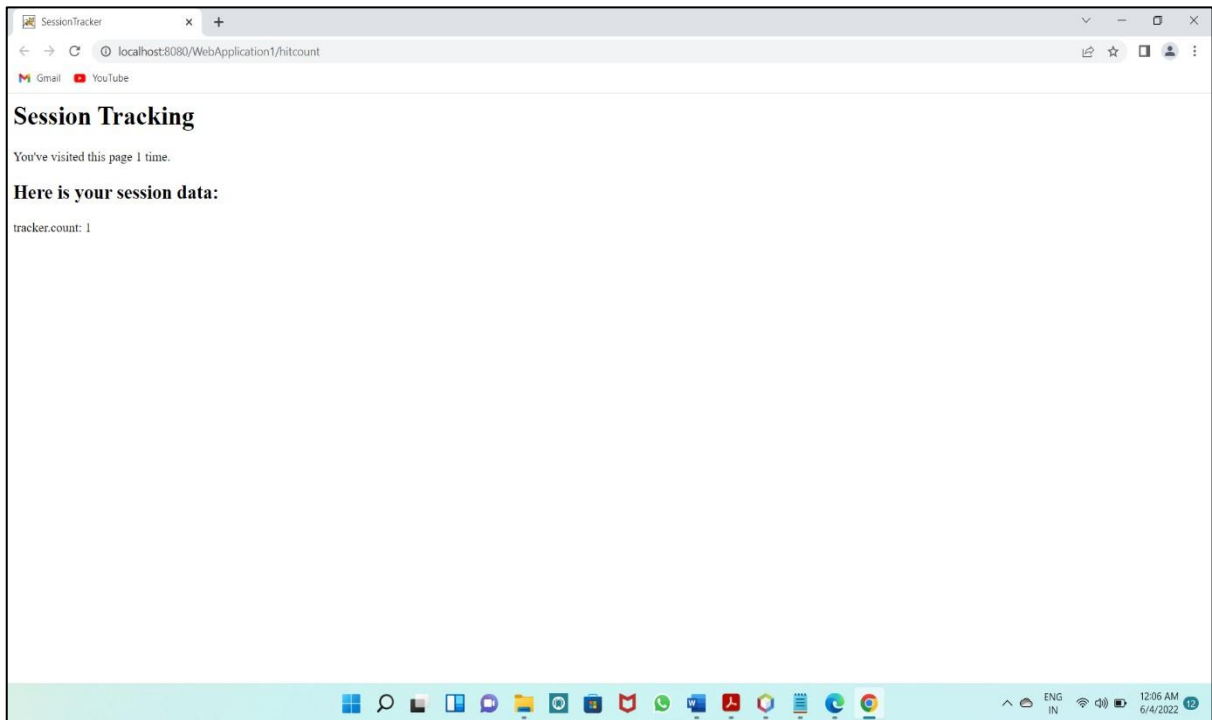 To write a java program to create session tracking for webpage hit count.

ALGORITHM:

1) Start the program.
2) Java Servlet file is created, with name hitcount.java.
3) Servlet package is imported and extended with class.
4) Servlet program to keep track of user visiting the page.
5)The count is incremented by one when user visits.
6) The output displays the greeting message.
7) The number of previous access is also displayed and verified.
8)Stop the program.

PROGRAM:

```
import jakarta.servlet.ServletException; import
jakarta.servlet.http.HttpServlet; import
jakarta.servlet.http.HttpServletRequest; import
jakarta.servlet.http.HttpServletResponse; import
jakarta.servlet.http.HttpSession; import
java.io.*; import java.util.*;
public class hitcount extends HttpServlet
{
public void doGet(HttpServletRequest req, HttpServletResponse res)
                throws ServletException, IOException {
res.setContentType("text/html"); PrintWriter
out = res.getWriter();
// Get the current session object, create one if necessary
HttpSession session = req.getSession();
// Increment the hit count for this page. The value is saved //
in this client's session under the name "tracker.count". Integer
count = (Integer)session.getAttribute("tracker.count"); if
(count == null) count = 1; else
count = new Integer(count + 1); session.setAttribute("tracker.count",
count);
out.println("<HTML><HEAD><TITLE>SessionTracker</TITLE></HEAD>");
out.println("<BODY><H1>Session Tracking</H1>");
out.println("You've visited this page " + count +((count.intValue() == 1) ? " time." : "
times.")); out.println("<P>"); out.println("<H2>Here is your session data:</H2>");
Enumeration enam = session.getAttributeNames();
while (enam.hasMoreElements()) { String
name = (String) enam.nextElement();
```

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OUTPUT:

```
 out.println(name + ": " + session.getAttribute(name) + "<BR>");
}
out.println("</BODY></HTML>");
}
}
```

RESULT:

        Thus, a java program to create session tracking for webpage hit count is executed successfully.

<table>
<tr><td>Ex.No: 05</td><td rowspan="2"><h2>THREE TIER APPLICATION</h2></td></tr>
<tr><td>Date:</td></tr>
</table>

AIM:

To write a Java program to create three-tier applications using servlets for conducting online examination for displaying student mark list.

ALGORITHM:

1)Start the program.
2)A login html page is created in the package to get the details of the user for online examination.
3)The acceptuser.jsp file is created to accept and verify user name and password.
4)After verifying the user and password, the examclient.html page opens which has questions for online examination.
5)After answering all the questions the mark is displayed in the screen. 6)Stop the program.

PROGRAM:

Login.html
```
<html>
 <head>
 <title>exam portal</title>
 <meta charset="UTF-8">
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
</head>
 <body>
 <div style="text-align: center">
 <h3>ONLINE EXAM PORTAL -Login </h3>
 <hr>
 <form method ="get" action="acceptuser.jsp">
 Username <input type="text" name="uname" value=""><br><br>
 Password <input type="password" name="pass" value=""><br>
 <button type="submit">LOGIN </button>
 </form>
</div>
 </body>
</html>
```

acceptuser.jsp
```
<%@ page import="java.sql.*"%>
<%@ page import="java.util.*"%> <%!
 Connection con;
 PreparedStatement ps1, ps2;
public void jspInit()
```

```
{
try  {
//loading the driver
Class.forName("com.mysql.jdbc.Driver").newInstance();
//establish the connection
con = DriverManager.getConnection("jdbc:mysql://localhost:3306/iplab","root","");
//create statement object
ps1 = con.prepareStatement("select count(*) from users where username = ? and
password=?");
ps2 = con.prepareStatement("select * from users");
}
catch(Exception ex)
{
ex.printStackTrace();
}
}
%>
<%
String param = request.getParameter("s1");
if(param =="link")
{
ResultSet rs = ps2.executeQuery();
out.println("<table>");  while(rs.next())
{
out.println("<tr>");
out.println("<td>"+rs.getString(1)+"</td>");
out.println("<td>"+rs.getString(2)+"</td");
out.println("</tr>");
}
out.println("</table>");
rs.close();
} else
{
//write jdbc code for authentication
String user = request.getParameter("uname");
String pass = request.getParameter("pass");
//set form data as param value
ps1.setString(1,user);  ps1.setString(2,pass);
//excute the query
ResultSet rs = ps1.executeQuery();
int cnt = 0;  if
(rs.next())  cnt =
rs.getInt(1);
if(cnt == 0)
out.println("<b><i><font color=red>Invalid credential</fonr></i></b>");
else
{
out.println("<form><fieldset style= width:25%; >");
```

```
 out.println("<b><i><font color=red>valid credential..</fonr></i></b><br>");
 out.println("<b><i><a href=examclient.html><font size=6 color=blue>Click Here to take
test</fonr></i></a></b>");
 out.println("</fieldset></form>");
 }
 }
%> <%!
 public void jspDestroy()
 {  try  {
//colse
ps1.close();
ps2.close();
con.close();
 }
 catch(Exception ex)
 {
 ex.printStackTrace();
 }
 }
%>
```

examclient.html
```
<html>
<head>
<title>Online Exam Client</title>
</head>
<body>
<h2 style="text-align:center">ONLINE EXAMINATION</h2>
<h3>Answer the following questions (5 marks for each correct answer)</h3> <hr/>
<form name="examForm" method="post" action="ExamServer.jsp">
1.Who is called as the father of computer?<br/>
<input type="radio" name="ans1" value="Sachin">Sachin
<input type="radio" name="ans1" value="Stuart">Stuart
<input type="radio" name="ans1" value="Charles Babbage">Charles Babbage
<input type="radio" name="ans1" value="Napier">Napier
<br/><br/>
2.C++ was developed by?<br/>
<input type="radio" name="ans2" value="Dennis Ritchie">Dennis Ritchie
<input type="radio" name="ans2" value="None">None
<input type="radio" name="ans2" value="David Ritchie">David Ritchie
<input type="radio" name="ans2" value="John">John
<br/><br/>
3.C was developed by?<br/>
<input type="radio" name="ans3" value="Dennis Ritchie">Dennis Ritchie
<input type="radio" name="ans3" value="Stroustrup">Stroustrup
<input type="radio" name="ans3" value="David Ritchie">David Ritchie
<input type="radio" name="ans3" value="Charles Babbage">Charles Babbage
<br/><br/>
```
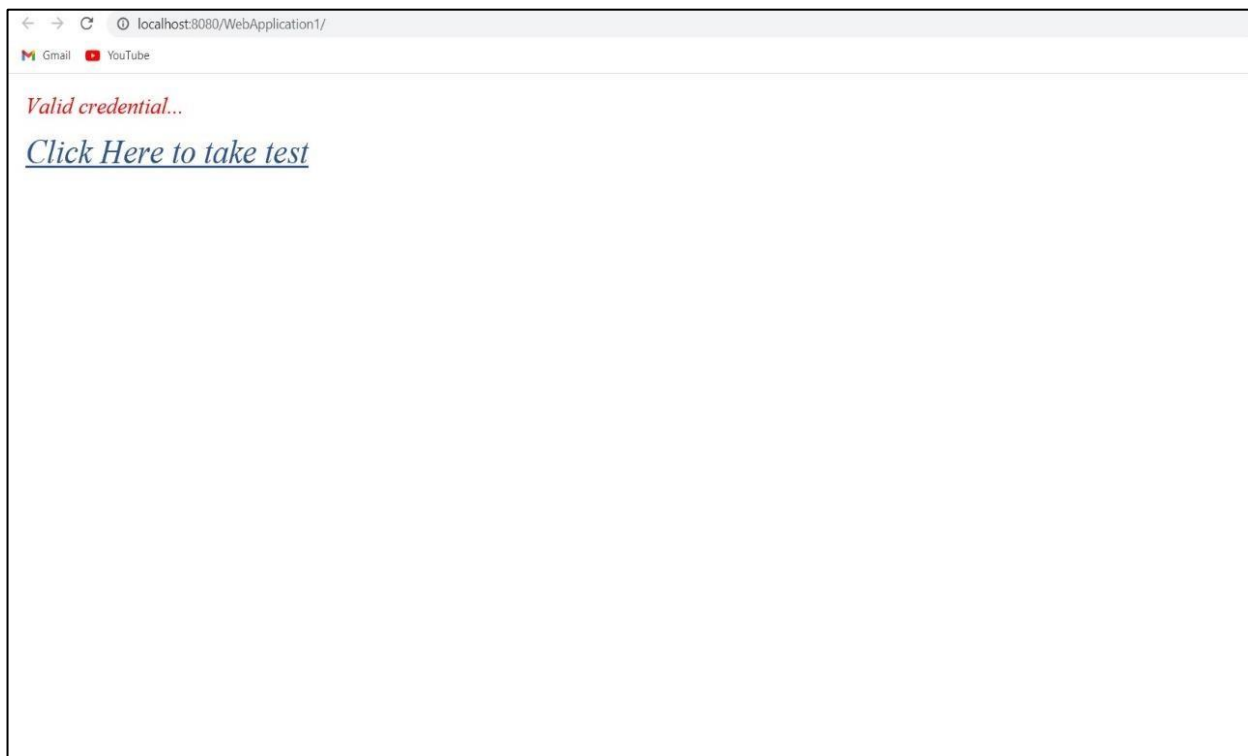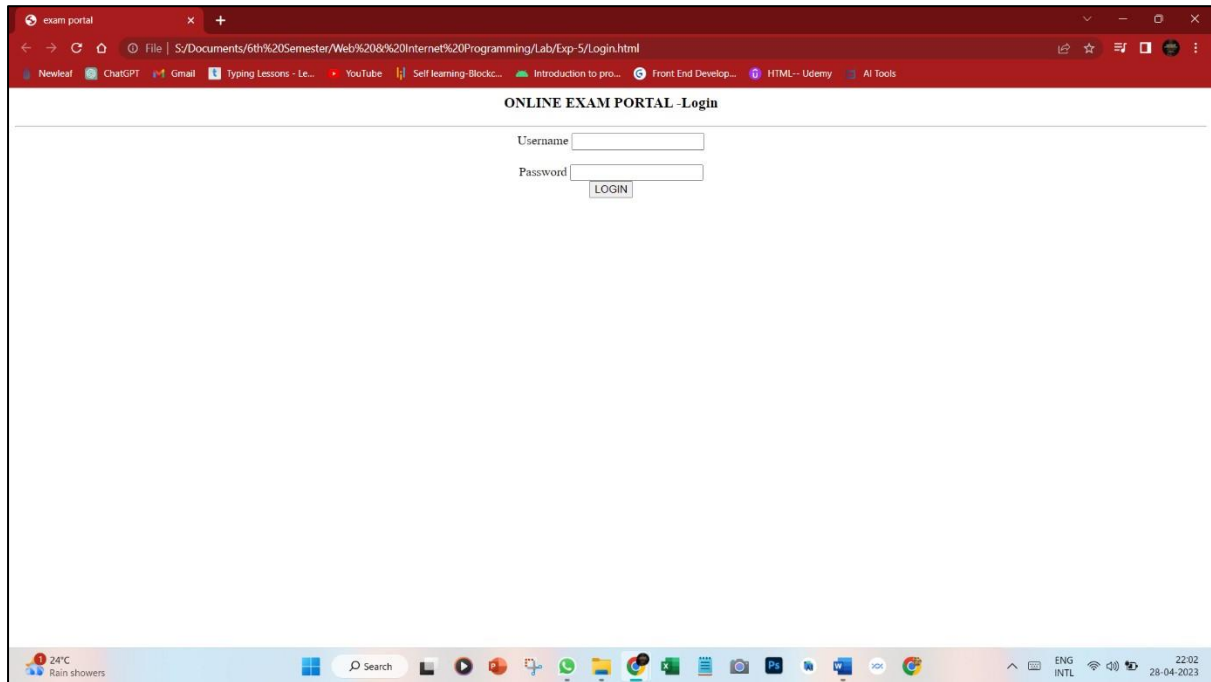
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```
<input type="submit" value="Check Your Result"/>
</form>
</body>
</html>
```

examserver.jsp
```jsp
<%@ page import="java.sql.*"%>
<%@ page import="java.util.*"%> <%!
 Connection con;
 PreparedStatement ps1, ps2;
public void jspInit()
 {
try
 {
 //loading the driver
 Class.forName("com.mysql.jdbc.Driver").newInstance();
 //establish the connection
 con = DriverManager.getConnection("jdbc:mysql://localhost:3306/iplab","root","");
 //create statement object
 ps1 = con.prepareStatement("select count(*) from users where username = ? and
password=?");
 ps2 = con.prepareStatement("select * from users");
 }
 catch(Exception ex)
 {
 ex.printStackTrace();
}
 }
%>
<%
 String param = request.getParameter("s1");
if(param =="link")
 {
 ResultSet rs = ps2.executeQuery();
out.println("<table>");  while(rs.next())
 {
 out.println("<tr>");
 out.println("<td>"+rs.getString(1)+"</td>");
out.println("<td>"+rs.getString(2)+"</td");
 out.println("</tr>");
 }
 out.println("</table>");
 rs.close();
} else {
 //write jdbc code for authentication
 String user = request.getParameter("uname");
 String pass = request.getParameter("pass");
```
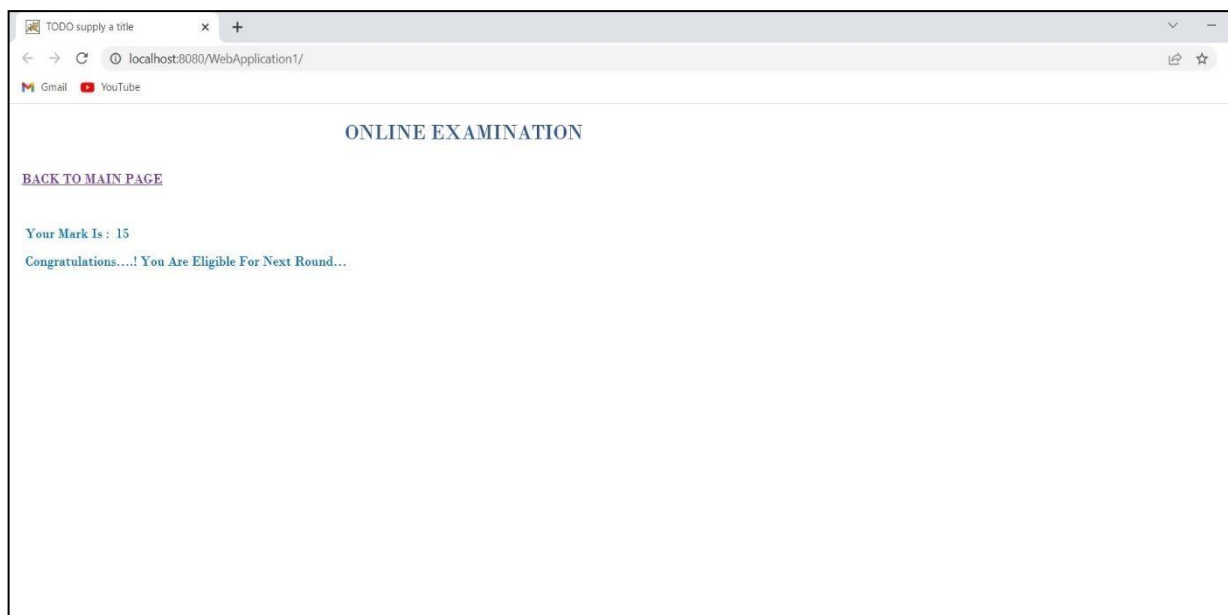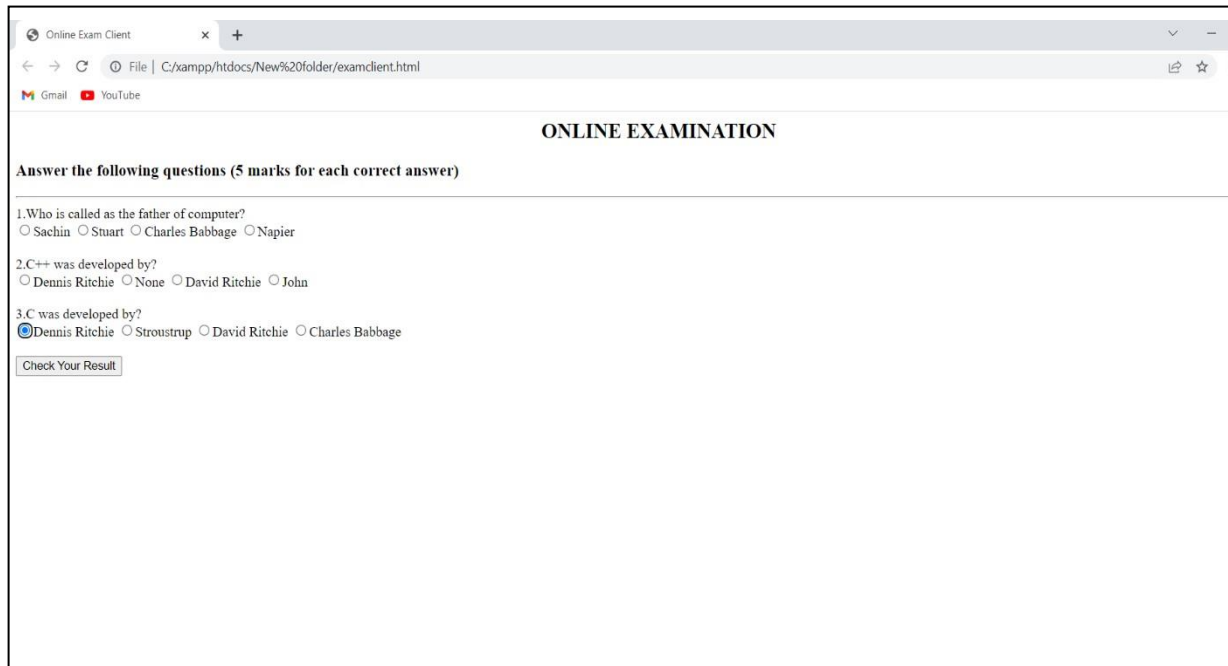
OUTPUT:

ONLINE EXAMINATION

Answer the following questions (5 marks for each correct answer)

1.Who is called as the father of computer?
○ Sachin ○ Stuart ○ Charles Babbage ○ Napier

2.C++ was developed by?
○ Dennis Ritchie ○ None ○ David Ritchie ○ John

3.C was developed by?
⦿ Dennis Ritchie ○ Stroustrup ○ David Ritchie ○ Charles Babbage

[Check Your Result]

ONLINE EXAMINATION

BACK TO MAIN PAGE

Your Mark Is : 15

Congratulations….! You Are Eligible For Next Round…

```jsp
   //set form data as param value
ps1.setString(1,user); ps1.setString(2,pass);
 //excute the query
 ResultSet rs = ps1.executeQuery();
 int cnt = 0;  if
(rs.next())  cnt =
rs.getInt(1);
if(cnt == 0)
 out.println("<b><i><font color=red>Invalid credential</fonr></i></b>");
else
 {
 out.println("<form><fieldset style= width:25%; >");  out.println("<b><i><font
color=red>valid credential..</fonr></i></b><br>");  out.println("<b><i><a
href=examclient.html><font size=6 color=blue>Click Here to take
test</fonr></i></a></b>");
 out.println("</fieldset></form>");
 }
 }
%> <%!
public void jspDestroy()
 { try {
//colse
ps1.close();
ps2.close();
con.close();
 }
 catch(Exception ex)
 {
ex.printStackTrace();
 }
 }
%>
```

RESULT:
　　　　　To write a Java program to create three-tier applications using servlets for
conducting online examination for displaying student mark list is executed successfully.

Ex.No: 06	**STATIC WEB PAGE INTO DYNAMIC WEB PAGE USING SERVLETS**
Date:	

AIM:

   To write a java program to convert static web page into dynamic web page using servlets.

ALGORITHM:

1)Start the program
2)Java Web Application is created using servlets.
3)In the Servlet program a shopping cart is created by giving the items as array elements.
4)Html codes are imbedded in the NewServlet.java program.
5)After saving the file, the servlet program is compiled and output is executed
6)From the page we can enter the items needed in the shopping cart and we can check out.
7)Stop the program.
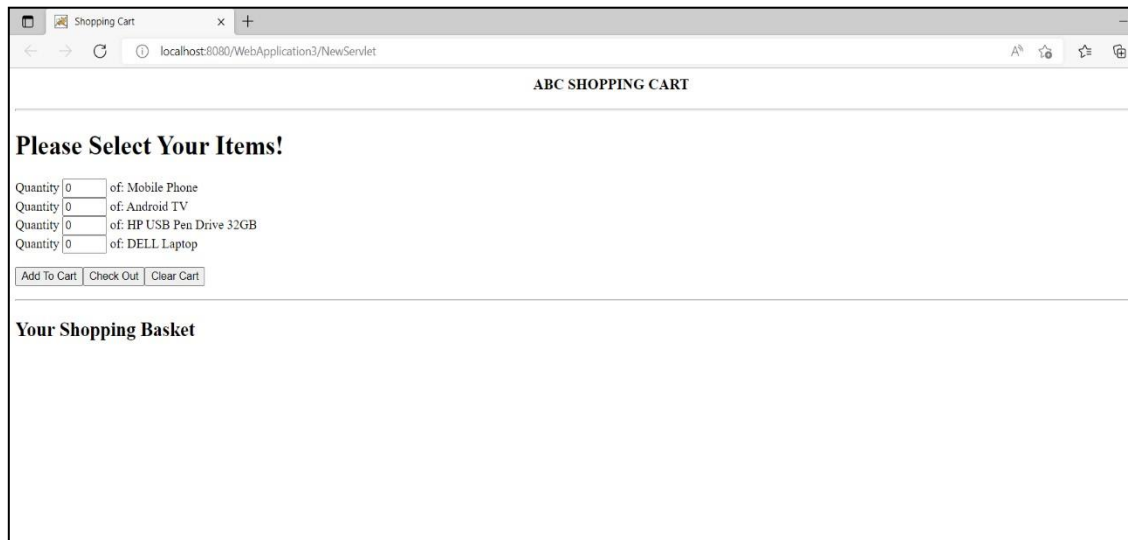
PROGRAM:

```
import jakarta.servlet.ServletException; import
jakarta.servlet.annotation.WebServlet; import
jakarta.servlet.http.HttpServlet; import
jakarta.servlet.http.HttpServletRequest; import
jakarta.servlet.http.HttpServletResponse; import
jakarta.servlet.http.HttpSession; import
java.io.*;
@WebServlet(urlPatterns = {"/ShoppingCart"}) public
class NewServlet extends HttpServlet
{
String [] items = new String []
{
 "Mobile Phone", "Android TV", "HP USB Pen Drive 32GB", "DELL Laptop"
};  protected void processRequest(HttpServletRequest request, HttpServletResponse
response)  throws ServletException, IOException
{
 response.setContentType("text/html;charset=UTF-8");
PrintWriter out = response.getWriter();
 out.println("<center><h3>ABC SHOPPING CART </h3></center>");
out.println("<hr>");
 // get or create the session information
HttpSession session = request.getSession();
 int [] purchases = (int [])session.getAttribute("purchases");
if ( purchases == null )
{
 purchases = new int [ items.length ];
session.setAttribute( "purchases", purchases );
 }
```

```java
out.println( "<html><head><title>Shopping Cart</title>"
+ "</title></head><body><p>" );  if (
request.getParameter("checkout") != null )
out.println("<h1>Thanks for ordering!</h1>");
else  {
if ( request.getParameter("add") != null )
{
addPurchases( request, purchases );
out.println( "<h1>Purchase added. Please continue</h1>");
} else  {  if (
request.getParameter("clear") != null )
for (int i=0; i<purchases.length; i++)
    purchases[i] = 0;
  out.println("<h1> Please Select Your Items! </h1>");
}
doForm( out, request.getRequestURI() );
}
showPurchases( out, purchases );
out.close();
}
void addPurchases( HttpServletRequest request, int [] purchases )
{
for (int i=0; i<items.length; i++) {
String added = request.getParameter( items[i] );
if ( added !=null && !added.equals("") )
purchases[i] += Integer.parseInt( added );
}
}
void doForm( PrintWriter out, String requestURI )
{
out.println( "<form method=POST action="+ requestURI +">" );
for(int i=0;i< items.length;i++)
    out.println( "Quantity <input name=\"" + items[i]+ "\" value=0 size=3> of: " + items[i]
+ "<br>");
out.println(
"<p><input type=submit name=add value=\"Add To Cart\">"
+ "<input type=submit name=checkout value=\"Check Out\">"
+ "<input type=submit name=clear value=\"Clear Cart\">"
+ "</form>" );
}
void showPurchases( PrintWriter out, int [] purchases )
throws IOException
{
out.println("<hr><h2>Your Shopping Basket</h2>");
for (int i=0; i<items.length; i++)
if ( purchases[i] != 0 )
out.println( purchases[i] +" "+ items[i] +"<br>" );
}
```

```java
// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on
//the left to edit the code.">
protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException
{
processRequest(request, response);
}
protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException
}
processRequest(request, response);
}
public String getServletInfo()
{
return "Short description";
}// </editor-fold>
}
```

RESULT:

        Thus, a java program to convert static web page into dynamic web page using servlets is executed successfully.

Ex.No: 07	STATIC WEB PAGE INTO DYNAMIC WEB PAGE
	USING JSP
Date:	

AIM:

To write a Java program to create book database using jsp for searching book from database.

ALGORITHM:

1)Start the program.

2)A database is created for storing 5 different types of books.

3)A login page is created to search the book.

4)A bookdisplay.jsp file is created to store book collection.

5)A booksearch.jsp file is created to search book by the input given in the login page.

6)Stop the program.

PROGRAM:

index.html
```
<!DOCTYPE html>
<!--
To change this license header, choose License Headers in Project Properties.
To change this template file, choose Tools | Templates and open the template
in the editor.
-->
<html>
 <head>
 <title>Book Catalog</title>
 <meta charset="UTF-8">
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
 </head>
 <body>
 <h3>ABC Book Store </h3>
 <hr>
 <a href="http://localhost:8080/WebApplication2/bookdisplay.jsp"> View All Books
```

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```
</a><BR>
 <TABLE>
<TR>
<TD><FORM ACTION="http://localhost:8080/WebApplication2/booksearch.jsp"
method="get" >
 Enter the Book title to search <input type="text" name ="bname" value="">
 <button type="submit">Search</button></TD>
</TR>
</TABLE>
 </body>
</html>
```

Bookdisplay.jsp

```
<%--
    Document   : bookdisplay
    Created on : 4 Apr, 2020, 6:06:32 PM
    Author     : ELCOT
--%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<%@ page import="java.sql.*" %>
<%@ page import="java.io.*" %>
<html>
<head>
<title>display data from the table using jsp</title>
</head>
<body>
<h2>Book Catalog</h2>
<%
try {
// declare a connection by using Connection interface
Connection connection = null;
/* declare object of Statement interface that is used for executing sql statements.
*/
```
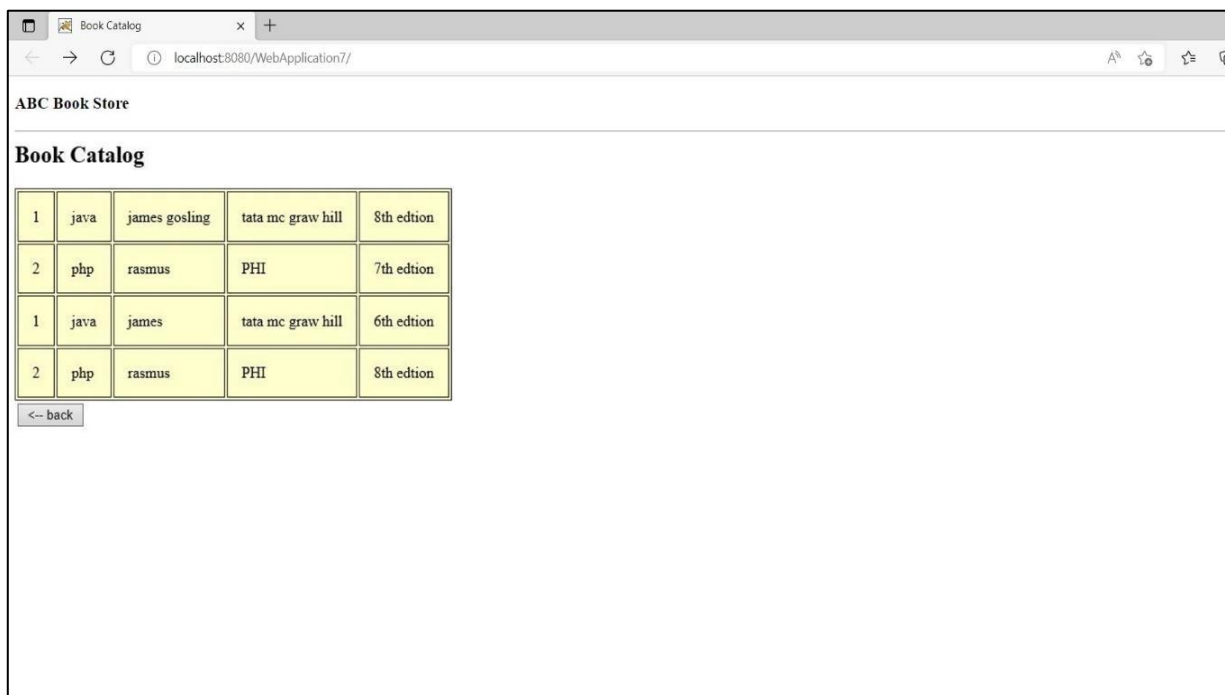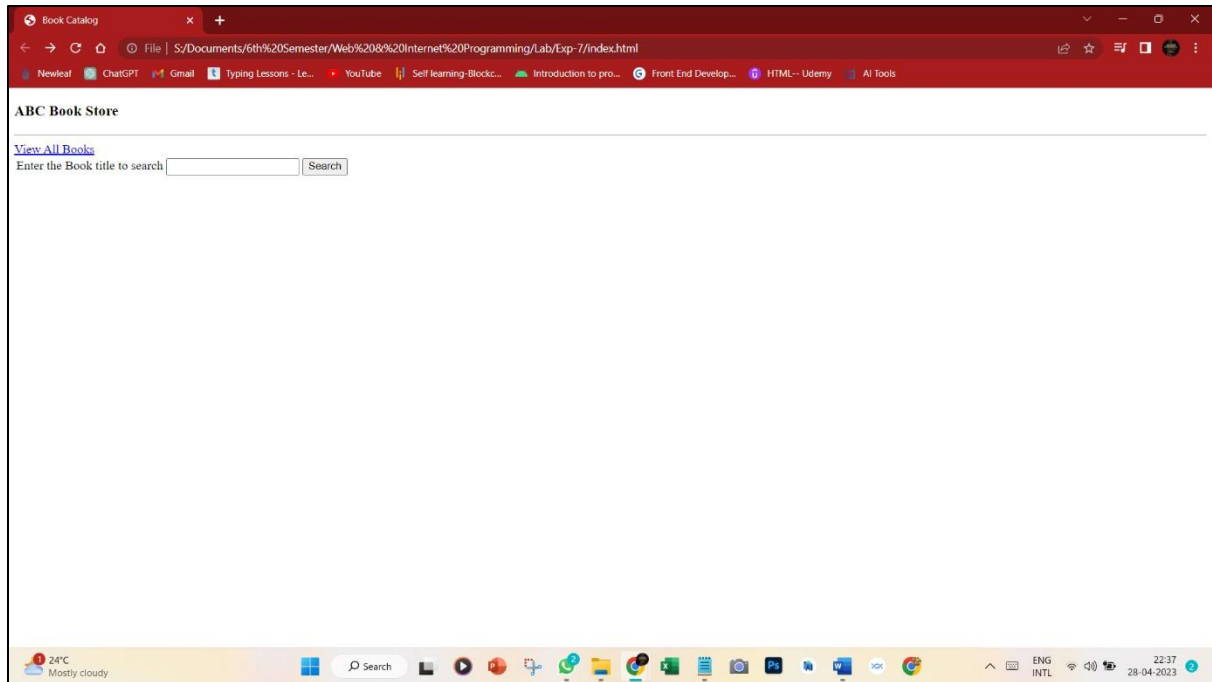
```jsp
Statement statement = null;
// declare a resultset that uses as a table for output data from tha table.
ResultSet rs = null;
// Load JBBC driver "com.mysql.jdbc.Driver"
Class.forName("org.apache.derby.jdbc.ClientDriver").newInstance(); connection =
DriverManager.getConnection("jdbc:derby://localhost:1527/iplab", "root", "root");
/* createStatement() is used for create statement object that is used for
sending sql statements to the specified database. */ statement =
connection.createStatement();
// sql query to retrieve values from the secified table.
String QueryString = "SELECT * from bookdb"; rs
= statement.executeQuery(QueryString);
%>
<TABLE cellpadding="15" border="1" style="background-color: #ffffcc;">
<%
while (rs.next()) {
%>
<TR>
<TD><%=rs.getInt(1)%></TD>
<TD><%=rs.getString(2)%></TD>
<TD><%=rs.getString(3)%></TD>
<TD><%=rs.getString(4)%></TD>
<TD><%=rs.getString(5)%></TD>
</TR>
<% } %>
<%
// close all the connections.
rs.close(); statement.close();
connection.close();
} catch (Exception ex) {
%>
</font>
<font size="+3" color="red"></b>
<%
out.println("Unable to connect to database.");
```

```
}
%>
</TABLE><TABLE>
<TR>
<TD><FORM ACTION="index.html" method="get" >
<button type="submit"><-- back</button></TD>
</TR>
</TABLE>
</font>
</body>
</html>
```

Booksearch.jsp

```
<%--
    Document   : booksearch
    Created on : 4 Apr, 2020, 6:12:14 PM
    Author     : ELCOT
--%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<%@ page import="java.sql.*" %>
<%@ page import="java.io.*" %>
<html>
<head>
<title>display data from the table using jsp</title>
</head>
<body>
<h2>Book Catalog</h2>
<%
try {
/* Create string of connection url within specified format with machine name,
port number and database name. Here machine name id localhost and
database name is student. */
String connectionURL = "jdbc:derby://localhost:1527/iplab";
```

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```
// declare a connection by using Connection interface
Connection connection = null;
/* declare object of Statement interface that is used for executing sql statements.
*/
Statement statement = null;
// declare a resultset that uses as a table for output data from tha table.
ResultSet rs = null;
// Load JBBC driver "com.mysql.jdbc.Driver"
Class.forName("org.apache.derby.jdbc.ClientDriver").newInstance(); /* Create
a connection by using getConnection() method that takes parameters of string
type connection url, user name and password to connect to database.*/
connection = DriverManager.getConnection(connectionURL, "root", "root");
/* createStatement() is used for create statement object that is used for sending
sql statements to the specified database. */ statement =
connection.createStatement();
String ss= request.getParameter("bname");
// sql query to retrieve values from the secified table.
String QueryString = "SELECT * from bookdb where bname like '"+ss+"%'"; rs
= statement.executeQuery(QueryString);
%>
<TABLE cellpadding="15" border="1" style="background-color: #ffffcc;">
<%
while (rs.next()) {
%>
<TR>
<TD><%=rs.getInt(1)%></TD>
<TD><%=rs.getString(2)%></TD>
<TD><%=rs.getString(3)%></TD>
<TD><%=rs.getString(4)%></TD>
<TD><%=rs.getString(5)%></TD>
</TR>
<% } %>
<%
// close all the connections.
```

OUTPUT:

```
 rs.close();
statement.close();
connection.close(); }
catch (Exception ex) {
%>
</font>
< font size="+3" color="red"></b>
<%
out.println(ex);
}
%>
</TABLE><TABLE>
<TR>
<TD><FORM ACTION="index.html" method="get" >
 <button type="submit"><--back</button></TD>
</TR>
</TABLE>
</font>
</body>
</html>
```

RESULT:

      Thus, a Java program to create book database using jsp for searching book from database is executed successfully.

Ex.No: 08	**CREATE AND SAVE XML DOCUMENT AT SERVER**
Date:	

AIM:

   To create and save an XML document at the server, which contain ten users information. To write a program which takes user id as an input and returns the user details by taking the user information from the XML document.

ALGORITHM:

1)Create an XML document and save Students information in the XML file on the specific location.
2)Create and establish the connection between html file and XML file.
3)Run the HTML file.
4)Get the user ID as input
5)Display the student's information.
6)Stop the program.

PROGRAM:

userlist.xml
```
<userlist>
<userid>user01</userid>
<username>Kumar</username>
<address>Erode</address>
<phone>9764634232</phone>
<email>kumar@gmail.com</email>
<userid>user02</userid>
<username>Naveen</username>
<address>Trichy</address>
<phone>9994244540</phone>
<email>naveen@gmail.com</email>
<userid>user03</userid>
<username>Sadhik</username> <address>Chennai</address>
<phone>9994244542</phone>
<email>sadhik@gmail.com</email>
<userid>user04</userid>
<username>Saravanan</username>
<address>Dharmapurai</address>
<phone>9835994445</phone>
<email>saravanan@gmail.com</email>
<userid>user05</userid>
<username>viveka</username>
<address>Perundurai</address>
<phone>968877555</phone>
<email>viveka@gmail.com</email>
```

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```
<userid>user06</userid>
<username>vinay</username>
<address>Coimbatore</address>
<phone>9678977555</phone>
<email>vinay@gmail.com</email>
<userid>user07</userid>
<username>geeta</username>
<address>Pollachi</address>
<phone>9634783455</phone>
<email>geeta@gmail.com</email>
<userid>user08</userid>
<username>Sriram</username>
<address>Madurai</address>
<phone>9623456835</phone>
<email>jsriram@gmail.com</email>
<userid>user09</userid>
<username>vishnu</username>
<address>Coimbatore</address>
<phone>9645231755</phone>
<email>vishnu@gmail.com</email>
<userid>user10</userid>
<username>Sivagami</username>
<address>Coimbatore</address>
<phone>9645231755</phone>
<email>Sivagami@gmail.com</email>
</userlist>
```

index.html
```
<HTML>
<HEAD>
<TITLE>Searching for XML Elements </TITLE>
<SCRIPT>
function readXMLData()
{
var xmlDocumentObject, id , name , addr, phone, email; xmlDocumentObject=new
XMLHttpRequest(); xmlDocumentObject.open("GET","userlist.xml",false);
xmlDocumentObject.send();
xmlDocumentObject=xmlDocumentObject.responseXML; id =
xmlDocumentObject.getElementsByTagName("userid"); name =
xmlDocumentObject.getElementsByTagName("username"); address
= xmlDocumentObject.getElementsByTagName("address"); phone
= xmlDocumentObject.getElementsByTagName("phone");
email = xmlDocumentObject.getElementsByTagName("email"); for
(i = 0; i < id.length; i++)
{
output=id[i].firstChild.nodeValue;
if (output == document.getElementById("myText").value) {displayDIV.innerHTML
= id[i].firstChild.nodeValue + "<br> " +
```
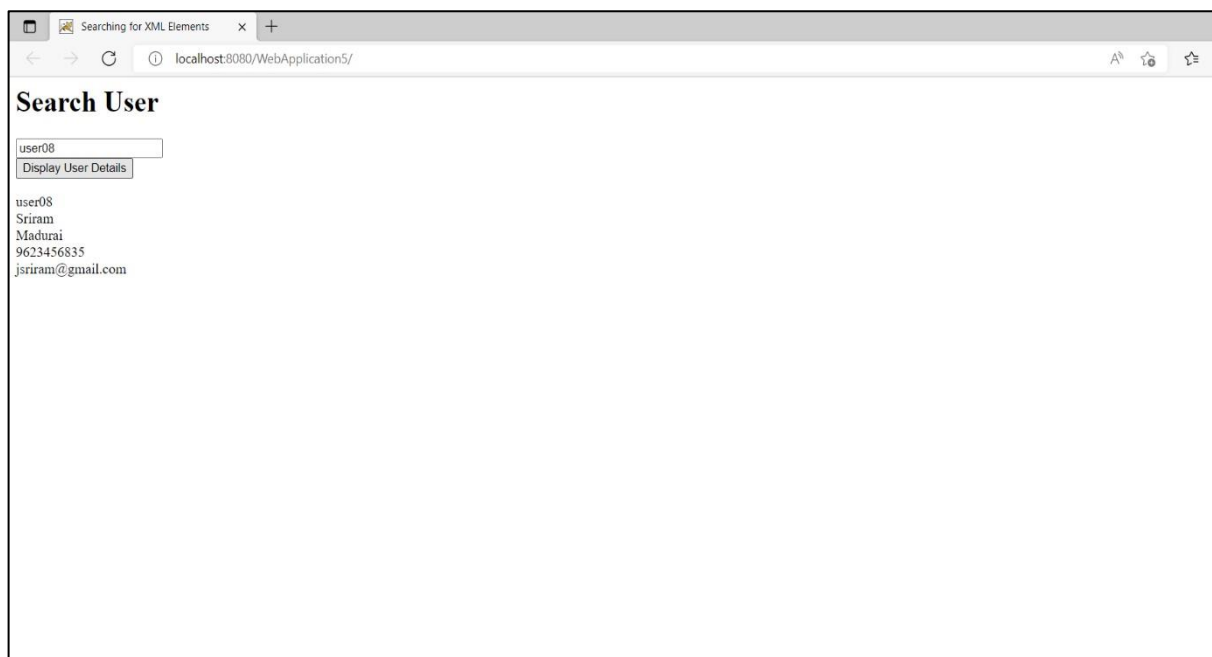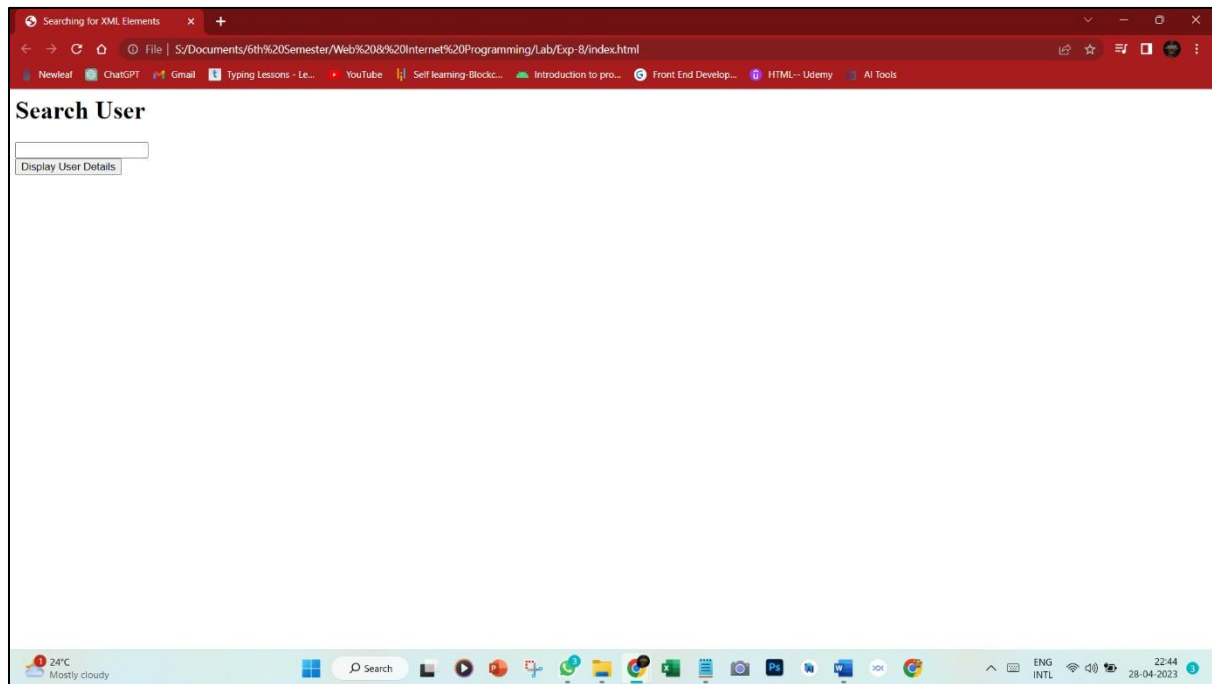
```
 Name[i].firstChild.nodeValue +"<br> " +address[i].firstChild.nodeValue + "<br> " +
phone[i].firstChild.nodeValue+"<br>"+email[i].firstChild.nodeValue;
}
}
}
</SCRIPT>
</HEAD>
<BODY>
<H1>Search User</H1>
<input type="text" id="myText" value=""><br>
<input type="BUTTON" VALUE="Display User Details" ONCLICK="readXMLData()">
<P>
<DIV ID="displayDIV"> </DIV>
</BODY>
</HTML>
```

RESULT:
       Thus, the html program to display user information from xml document is
executed successfully.

Ex.No: 09-A	**PHP FORM VALIDATION**
Date:	

AIM:

To write a PHP program to validate form which includes fields using PHP regular expression.

ALGORITHM:

1)Start the program.
2)A PHP file is created using .php extension.
3)The PHP file is executed by giving the file name and local host in any web browser
4)The code below checks that the field is not empty. If the user leaves the required field empty, it will show an error message.
5) All the Input Fields must be required.
6)The input data is displayed after giving the submit button.
7)Stop the program.

PROGRAM:

```
<!DOCTYPE html>
<html>
<head>
<style>
.error {color: #FF0001;}
</style>
</head>
<body>
<?php
$nameErr = $emailErr = $mobilenoErr = $genderErr = $websiteErr = $agreeErr = "";
$name = $email = $mobileno = $gender = $website = $agree = "";   if
($_SERVER["REQUEST_METHOD"] == "POST") {
if (empty($_POST["name"])) {                              //String Validation
$nameErr = "Name is required";
} else {
$name = input_data($_POST["name"]);
if (!preg_match("/^[a-zA-Z ]*$/",$name)) {     // check if name only contains letters and whitespace
$nameErr = "Only alphabets and white space are allowed";
}
}
//Email Validation    if
(empty($_POST["email"])) {
$emailErr = "Email is
required";
} else {
```

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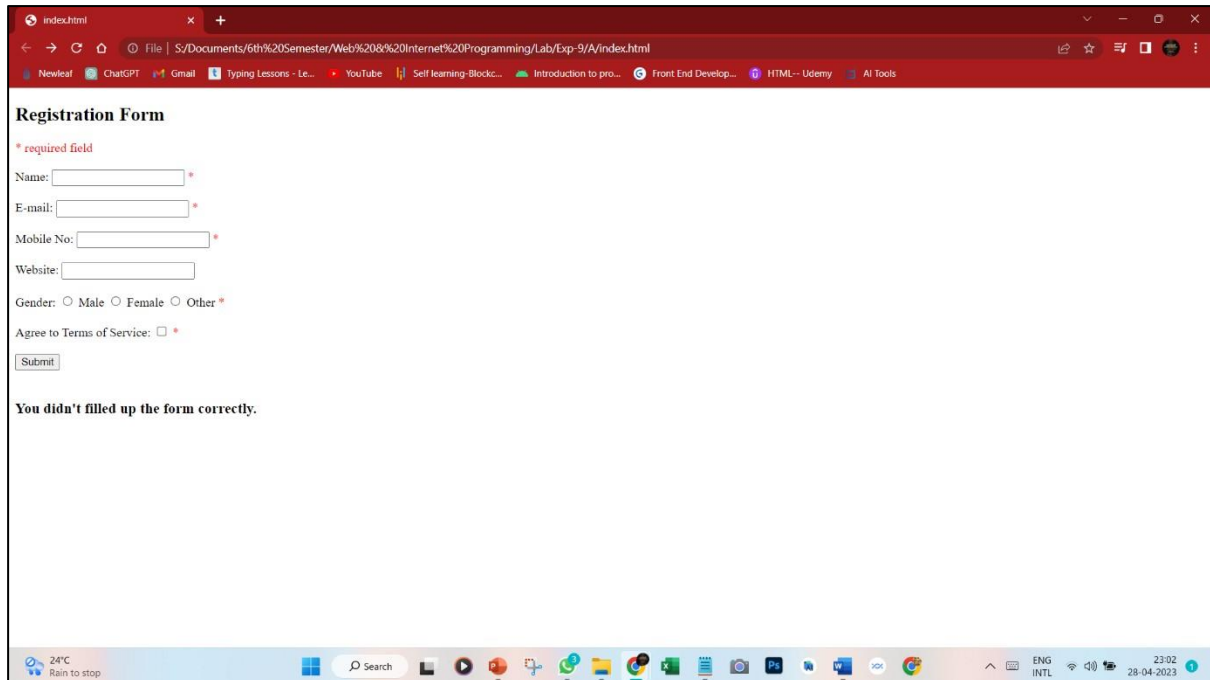
```php
$email = input_data($_POST["email"]);
if (!filter_var($email, FILTER_VALIDATE_EMAIL)) {
$emailErr = "Invalid email format";  }  }
if (empty($_POST["mobileno"])) {                    //Number Validation   $mobilenoErr
= "Mobile no is required";
} else {
$mobileno = input_data($_POST["mobileno"]);   if
(!preg_match ("/^[0-9]*$/", $mobileno) ) {
$mobilenoErr = "Only numeric value is allowed.";
}
if (strlen ($mobileno) != 10) {
$mobilenoErr = "Mobile no must contain 10 digits.";
}  }
//URL Validation
if (empty($_POST["website"])) {
$website = "";
} else {
$website = input_data($_POST["website"]);
if (!preg_match("/\b(?:(?:https?|ftp):\/\/|www\.)[-a-z0-9+&@#\/%?=~_|!:,.;]*[-a-
z09+&@#\/%=~_|]/i",$website))
{
$websiteErr = "Invalid URL";
}     }
//Empty Field Validation   if
(empty($_POST["gender"])) {
$genderErr = "Gender is
required";
} else {
$gender = input_data($_POST["gender"]);
}
//Checkbox Validation   if
(!isset($_POST['agree'])){
$agreeErr = "Accept terms of services before submit.";
} else {
$agree = input_data($_POST["agree"]);
}  }
function input_data($data) {   $data
= trim($data);
$data = stripslashes($data);
$data = htmlspecialchars($data);
return $data;
}
?>
<h2>Registration Form</h2>
<span class = "error">* required field </span>
<br><br>
<form method="post" action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]);
?>" >
```

```
 Name:
<input type="text" name="name">
<span class="error">* <?php echo $nameErr; ?>
</span>  <br><br>  E-mail:
<input type="text" name="email">
<span class="error">* <?php echo $emailErr; ?> </span>
<br><br>  Mobile
No:
<input type="text" name="mobileno">
<span class="error">* <?php echo $mobilenoErr; ?>
</span>  <br><br>  Website:
<input type="text" name="website">
<span class="error"><?php echo $websiteErr; ?>
</span>  <br><br>  Gender:
<input type="radio" name="gender" value="male"> Male
<input type="radio" name="gender" value="female"> Female
<input type="radio" name="gender" value="other"> Other
<span class="error">* <?php echo $genderErr; ?> </span>
<br><br>
Agree to Terms of Service:
<input type="checkbox" name="agree">
<span class="error">* <?php echo $agreeErr; ?> </span>
<br><br>
<input type="submit" name="submit" value="Submit">
<br><br>
</form>
<?php
if (isset($_POST['submit'])) {
if($nameErr == "" && $emailErr == "" && $mobilenoErr == "" && $genderErr == "" &&
$websiteErr == "" && $agreeErr == "") {
echo "<h3 color = #FF0001> <b>You have sucessfully registered.</b> </h3>";
echo "<h2>Your Input:</h2>";  echo "Name: " .$name;  echo "<br>";  echo
"Email: " .$email;  echo "<br>";
echo "Mobile No: " .$mobileno;
echo "<br>";
echo "Website: " .$website;  echo
"<br>";
echo "Gender: " .$gender;
} else {
echo "<h3> <b>You didn't filled up the form correctly.</b> </h3>";
}  }
?>
</body>
</html>
```
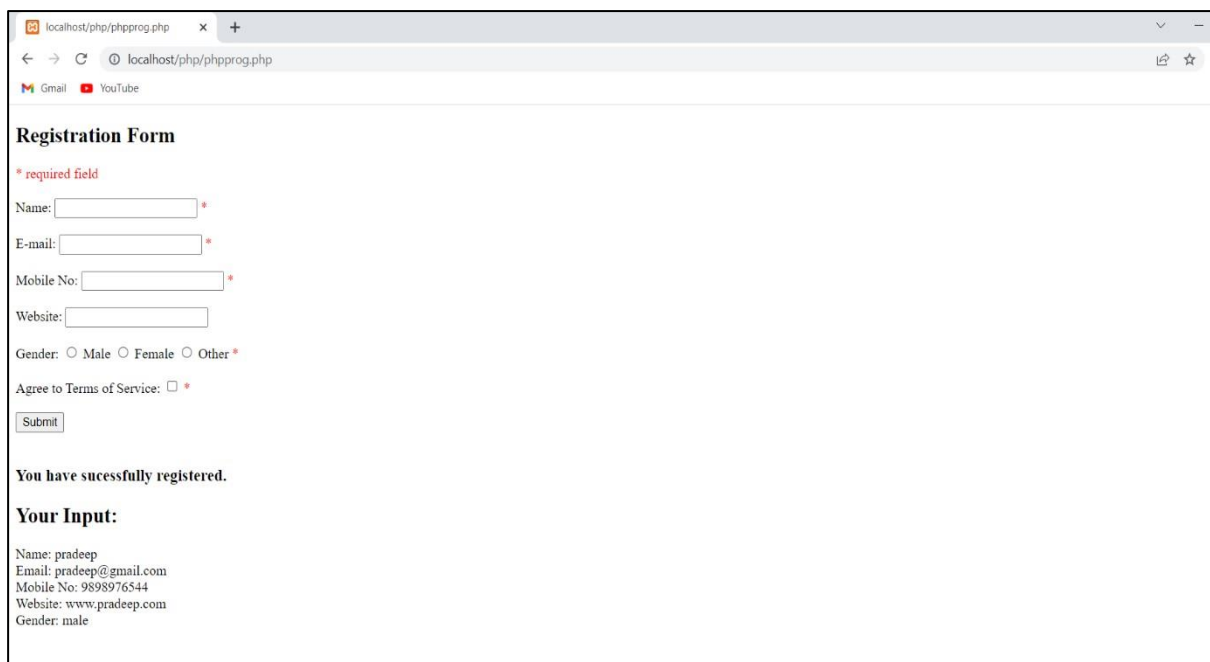
RESULT:

      Thus, a PHP program to validate form which includes fields using PHP regular expression is executed successfully.

Ex.No: 09-B	
Date:	**STORING PHP FORM DATA INTO DATABASE**

AIM:

To write a PHP program to store form data into database.

ALGORITHM:

1)Start the program.
2)A PHP file is created using .php extension.
3)The PHP file is executed by giving the file name and local host in any web browser
4)The code below checks that the field is not empty. If the user leaves the required field empty, it will show an error message.
5) All the Input Fields must be required.
7)Database and table is created in myphpadmin.
6)The input data is loaded into database created in phpMyAdmin. 7)Stop the program.

PROGRAM:

index.php
```
<!DOCTYPE html>
<html lang="en">
<head>
<title>GFG- Store Data</title>
</head>
<body>
<h1>Storing Form data in Database</h1>
<form action="insert.php" method="post">
<p>
<label for="firstName">First Name:</label>
<input type="text" name="first_name" id="firstName"> </p>
<p>
<label for="lastName">Last Name:</label>
<input type="text" name="last_name" id="lastName">
</p>
<p>
<label for="Gender">Gender:</label>
<input type="text" name="gender" id="Gender">
</p> <p>
<label for="Address">Address:</label>
<input type="text" name="address" id="Address"
</p>
<p>
<label for="emailAddress">Email Address:</label>
<input type="text" name="email" id="emailAddress">
```

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```
</p>
<input type="submit" value="Submit">
</form>  </body>
</html>
```

insert.php
```
<!DOCTYPE html>
<html>
<head>
<title>Insert Page page</title>
</head>
<body>
<center>
<?php
// servername => localhost
// username => root
// password => empty
// database name => staff
$conn = mysqli_connect("localhost", "root", "", "staff");
// Check connection if($conn ===
false){ die("ERROR: Could not
connect. "
. mysqli_connect_error()); }
// Taking all 5 values from the form data(input)
$first_name =  $_REQUEST['first_name'];
$last_name = $_REQUEST['last_name'];
$gender =  $_REQUEST['gender'];
$address = $_REQUEST['address'];
$email = $_REQUEST['email'];
// Performing insert query execution
// here our table name is college
$sql = "INSERT INTO college  VALUES ('$first_name',
'$last_name','$gender','$address','$email')";
if(mysqli_query($conn, $sql)){ echo "<h3>data stored
in a database successfully."
. " Please browse your localhost php my
admin" . " to view the updated data</h3>";
echo nl2br("\n$first_name\n $last_name\n "
. "$gender\n $address\n $email");
} else{
echo "ERROR: Hush! Sorry $sql. "
. mysqli_error($conn);  }
//    Close    connection
mysqli_close($conn); ?>
</center>
</body>
</html>
```

OUTPUT:

RESULT:

Successfully. Thus, a PHP program to store form data into database is executed.

Ex.No: 10	**THREE TIER APPLICATION**
Date:	

AIM:

To write a web services for predicting for any product sales.

ALGORITHM:

1)Start the program.
2)Open the Home page to review 2 products.
3) View the 2 products.
4)Put the rating by user.
5)Display the high rating product on the top of the page.
6)Stop the program.

PROGRAM:

page.html
```
<html
lang="en">
<head>
<title>AJAX 5 Star Rating</title>
<script src="http://code.jquery.com/jquery-latest.js"></script> <script>
// This is the first thing we add -----------------------------------------
$(document).ready(function() {
$('.rate_widget').each(function(i) { var widget = this;
var out_data = {
widget_id : $(widget).attr('id'), fetch: 1
};
$.post( 'ratings.php', out_data, function(INFO) {
$(widget).data( 'fsr', INFO );
set_votes(widget);
},
'json'
);
});
$('.ratings_stars').hover(
// Handles the mouseover function() {
$(this).prevAll().andSelf().addClass('ratings_over');
$(this).nextAll().removeClass('ratings_vote');
},
// Handles the mouseoutfunction() {
$(this).prevAll().andSelf().removeClass('ratings_over');
```

```
// can't use 'this' because it wont contain the updated data set_votes($(this).parent()); }
);
// This actually records the vote
$('.ratings_stars').bind('click', function() { var star = this; var
widget = $(this).parent();
var clicked_data = { clicked_on :$(star).attr('class'), widget_id
: $(star).parent().attr('id')
};
$.post( 'ratings.php', clicked_data, function(INFO) {
widget.data( 'fsr', INFO ); set_votes(widget);
},
'json'
);
});
});
function set_votes(widget) { var avg =
$(widget).data('fsr').whole_avg;
var votes = $(widget).data('fsr').number_votes; var exact =
$(widget).data('fsr').dec_avg; window.console&& console.log('and now in set_votes, it
thinks the fsr is ' +
$(widget).data('fsr').number_votes);
$(widget).find('.star_' + avg).prevAll().andSelf().addClass('ratings_vote');
$(widget).find('.star_' + avg).nextAll().removeClass('ratings_vote');
$(widget).find('.total_votes').text( votes + ' votes recorded (' + exact + ' rating)' ); }
</script>
<style>
.rate_widget {
border: 1px solid #CCC; overflow: visible; padding: 10px; position:
relative; width: 180px; height: 32px;
}
.ratings_stars {
background: url('star_empty.png') no-repeat; float: left; height:
28px; padding: 2px; width: 32px;
}
.ratings_vote {
background: url('star_full.png') no-repeat;
}
.ratings_over {
background: url('star_highlight.png') no-repeat;
}
.total_votes {
background:
#eaeaea; top: 58px;
left: 0; padding: 5px;
position: absolute;
}
.movie_choice {
font: 10px verdana, sans-serif; margin: 0 auto 40px auto; width: 180px;
```
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```
}
h1 {
text-align: center; width: 400px; margin: 20px auto;
}
</style>
</head>
<body>
<h1> Rate the following movies! </h1>
<div class='movie_choice'> Rate: Raiders of the Lost Ark
<div id="r1" class="rate_widget">
<div class="star_1 ratings_stars"></div>
<div class="star_2 ratings_stars"></div>
<div class="star_3 ratings_stars"></div>
<div class="star_4 ratings_stars"></div>
<div class="star_5 ratings_stars"></div>
<div class="total_votes">vote data</div>
</div>
</div>
<div class='movie_choice'>
Rate: The Hunt for Red October
<div id="r2" class="rate_widget">
<div class="star_1 ratings_stars"></div>
<div class="star_2 ratings_stars"></div>
<div class="star_3 ratings_stars"></div>
<div class="star_4 ratings_stars"></div>
<div class="star_5 ratings_stars"></div>
<div class="total_votes">vote data</div>
</div>
</div>
</body>
</html>
```

ratings.php
```php
<?php
$rating = new ratings($_POST['widget_id']); isset($_POST['fetch']) ?
$rating->get_ratings() : $rating->vote(); class ratings {
var $data_file = './ratings.data.txt'; private $widget_id;
private $data = array();  functionconstruct($wid) {
$this->widget_id = $wid;
$all = file_get_contents($this->data_file); if($all) {
$this->data = unserialize($all);
}
}
public function get_ratings() { if($this->data[$this-
>widget_id]) {  echo json_encode($this-
>data[$this->widget_id]);
```

OUTPUT:

```php
} else {
$data['widget_id'] = $this->widget_id;
$data['number_votes'] = 0;
$data['total_points'] = 0;
$data['dec_avg'] = 0;
$data['whole_avg'] = 0; echo json_encode($data);
}
}
public function vote() {  # Get
the value of the vote
preg_match('/star_([1-5]{1})/', $_POST['clicked_on'], $match);  $vote = $match[1];
$ID = $this->widget_id;
# Update the record if it exists if($this->data[$ID]) {
$this->data[$ID]['number_votes'] += 1;
$this->data[$ID]['total_points'] += $vote;
}
# Create a new one if it doesn't else {
$this->data[$ID]['number_votes'] = 1;
$this->data[$ID]['total_points'] = $vote;
}
$this->data[$ID]['dec_avg'] = round( $this->data[$ID]['total_points'] /
$this->data[$ID]['number_votes'], 1 );
$this->data[$ID]['whole_avg'] = round( $this->data[$ID]['dec_avg'] );
file_put_contents($this->data_file, serialize($this->data));
$this->get_ratings();
}
# ---
# end class
}
```

RESULT:

Thus, a web services for predicting for any product sales is executed successfully.