LIST OF EXPERIMENTS

1. Create a web page with the following using HTML a. To embed a map in a web page b. To fix the hot spots in that map c. Show all the related information when the hot spots are clicked.
2. Create a web page with the following. a. Cascading style sheets. b. Embedded style sheets. c. Inline style sheets. Use our college information for the web pages.
3. Validate the Registration, user login, user profile and payment by credit card pages using JavaScript.
4. Write programs in Java using Servlets: i. To invoke servlets from HTML forms ii. Session tracking using hidden form fields and Session tracking for a hit count
5. Write programs in Java to create three-tier applications using servlets for conducting on-line examination for displaying student mark list. Assume that student information is available in a database which has been stored in a database server.
6. Install TOMCAT web server. Convert the static web pages of programs into dynamic web pages using servlets (or JSP) and cookies. Hint: Users information (user id, password, credit card number) would be stored in web.xml. Each user should have a separate Shopping Cart.
7. Redo the previous task using JSP by converting the static web pages into dynamic web pages. Create a database with user information and books information. The books catalogue should be dynamically loaded from the database.
8. Create and save an XML document at the server, which contains 10 users Information. Write a Program, which takes user Id as an input and returns the User details by taking the user information from the XML document
9. i. Validate the form using PHP regular expression. ii. PHP stores a form data into database.
10. Write a web service for finding what people think by asking 500 people‘s opinion for any consumer product.

EXPT NO:1	**Image Mapping**
DATE:	

1.Create a web page with the following using HTML
i) To embed an image map in a web page
ii) To fix the hot spots
iii) Show all the related information when the hot spots are clicked.

AIM:

To write a map and fix the hotspots to show the information of it in a web page.

ALGORITHM:

1. Open a notepad.
2. Write the code for indexmap.html.
3. Get the india map image and link it to the package.

<img src="indiamap.jpg">

<img align="right" src = "India Map.jpg" usemap="#india">

4. Fix the hotspots in that image.
5. Map the reference of the hotspots in the image.

<area shape="circle" coords="274,745,20" href="tn.html">

6. Mention the derived link.
7. Click the link to get the desired image.
8. Run the program in a web browser.
9. Stop the program.

Indexmap.html

```
<html>
<head>
<title>Home - States of India!!!</title>
</head>
<body bgcolor="#gop6876cgdt5564ss">
<h1><u><center>Republic of India</center></u></h1>
<p>
```

India is the Seventh Lagest country in the world by geographical area, the second most populous country with over 1.2 billion people, and the populus democracy in the world. India is a federal constitutional republic with a parliamentry democracy consisting of 28 states and 7 union Terriories.
</p>

<map name="india">
<AREA SHAPE="rect" COORDS="190,477,251,562" HREF="tamilnadu.html" target="tamilnadu.html" >
<AREA SHAPE="rect" COORDS="158,477,195,564" HREF="kerala.html" target="kerala.html" >
<AREA SHAPE="rect" COORDS="217,378,238,472,350,361" HREF="andhra.html" target="andhra.html" >
<AREA SHAPE="rect" COORDS="160,474,212,401,189,436" HREF="karnataka.html" target="karnataka.html" >
</map>

<h2> Features</h2>

Population - 1,028,783,343(2001 census).
Capital - New Delhi
Largest City - Mumbai
Currency - Indian Rupee
Time Format - IST (UTC + 5:30)
NAtion Sport - Hockey
Current PM - Manmohan Singh
Current President - Prathiba Patil

<h2>
To view details of states please click on the specified area in the map !!!
</h2>
</body>
</html>

tamilnadu.html

```
<html>
<head><title>Tamil Nadu - India</title></head>
<body bgcolor="palegreen">
<h1><center>Tamil Nadu</center></h1>
<h3>is one of the 28 states of India. Its capital and largest city is Chennai.
Tamil Nadu lies in the southernmost part of the Indian Peninsula and
is bordered by the States of puducherry, Kerala, Karnataka, Andha Pradesh.
</h3>
<h3>
<ul>
<li>Districts<i> - 32</i>
<li>Capital City<i> - Chennai</i>
<li>Largest City<i> - Chennai</i>
<li>Governor<i> - ?</i>
<li>Chief Minister<i> - Jayalalithaa</i>
<li>Population<i> - 72,138,958</i>
<li>Tourist spots<i> - Mamallapuran, Ooty, Kodaikanal, Marina,
Mudurai Meenakshi Amman Temple, Thanjavur etc.,</i>
</ul>
<a href="Home.html">back</a>
</body>
</html>
```

kerala.html

```
<html>
<head><title>Kerala - India</title></head>
<body bgcolor="indianred">
<h1><center>Kerala</center></h1>
<h3>
<ul>
<li>Districts<i> - 14</i>
<li>Capital City<i> - Thiruvanandapuram</i>
<li>Largest City<i> - Thiruvanandapuram</i>
<li>Governor<i> - Hansraj Bhardwaj</i>
<li>Chief Minister<i> -Oommen Chandy </i>
<li>Population<i> - 33,387,677</i>
<li>Tourist spots<i> - Edakkal Caves, Palayur, Kovalam Beach,Munnar, Kochi,
Alapuzha etc.,</i>
</ul>
</h3>
<a href="Home.html">Back</a>
</body>
```

```
</html>
```

andhra.html

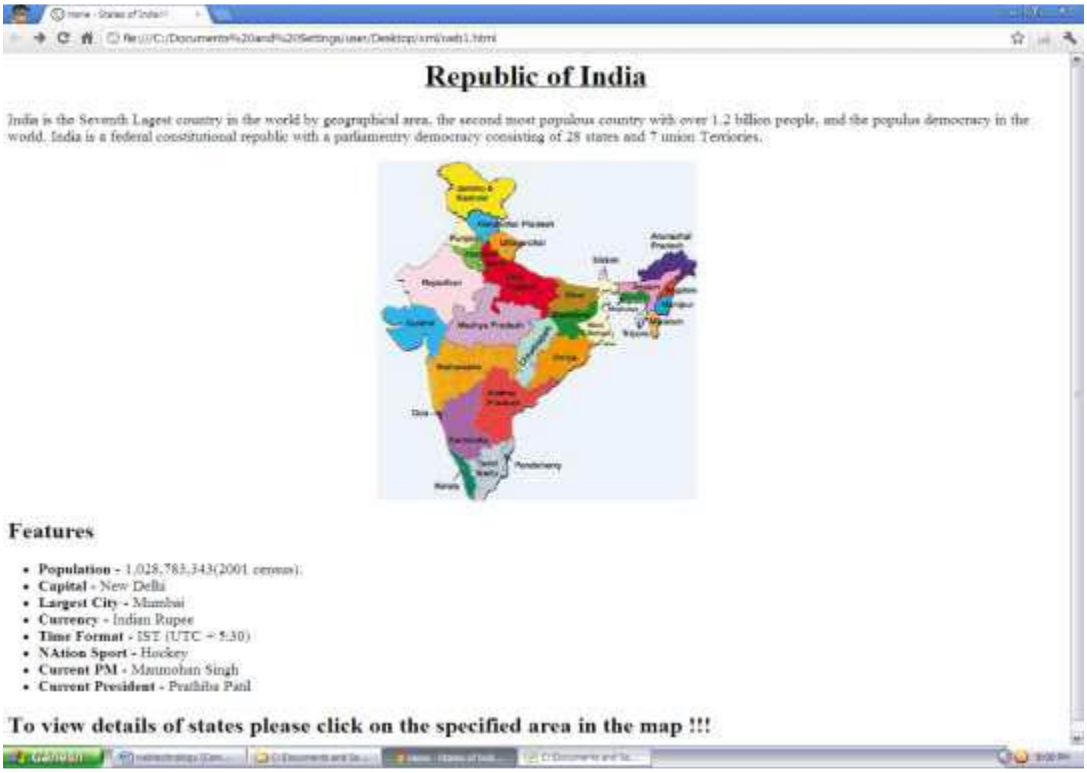
```
<html>
<head><title>Andhra Pradesh - India</title></head>
<body bgcolor="tan">
<h1><center>Andhra Pradesh</center></h1>
<h3>A.P., is a state situated on the southeastern coast of India. It is
India's fourth largest state by area and fifth largest by population.</h3>
<h3>
<ul>
<li>Districts<i> - 23</i>
<li>Capital City<i> - Hyderabad</i>
<li>Largest City<i> - Hyderabad</i>
<li>Governor<i> - E. S. L. Narasimhan</i>
<li>Chief Minister<i> - N. Kiran Kumar Reddy</i>
<li>Population<i> - 78,323,330</i>
<li>Tourist spots<i> - Tirumala Tirupati, Charminar, Golconda Fort,
Chandragiri, Chowmahalla Place, Falaknuma Palace etc.,</i>
</ul>
<a href="Home.html">back</a>
</body>
</html>
```

karnataka.html

```
<html>
<head><title>Karnataka - India</title></head>
<body bgcolor="wheat">
<h1><center>Karnataka</center></h1>
<h3>
<ul>
<li>Districts<i> - 30</i>
<li>Capital City<i> - Bangalore</i>
<li>Largest City<i> - Bangalore</i>
<li>Governor<i>- Hansraj Bhardwaj</i>
<li>Chief Minister<i> - D. V. Sadananda Gowda</i>
<li>Population<i> - 61,130,704</i>
<li>Tourist spots<i> - Gol Gumbaz, Mysore Palace, Keshava Temple etc.,</i>
</ul>
</h3>
```

```
<a href="Home.html">back</a>
</body>
</html>
```

Output:



RESULT:

Thus the web page is created and the image is embedded with hot spot and the linking packages successfully, and the output is verified.

EXPT NO:2	DESIGN AND DEVELOPMENT OF HTML PAGE ALONG WITH INTERNAL AND EXTERNAL STYLE SHEET.
DATE:	

AIM

To write a webpage that displays college information using various style sheets.

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 stylesheets.
6. Create an inline and internal style and make a link to the external style sheet.
7. Stop the program.

PROGRAM

main.html

```
<html>
<frameset cols="25%,75%">
<frame src="home.html" name="f1"></frame>
<frame src="ss.html" name="f2"></frame>
</frameset>
</html>
```

home.html

```
<html>
<body>
<a href="internal.html" target="f2">INLINE</a>
<a href="external.html" target="f2">EXTERNAL</a>
<a href="embedded.html" target="f2">EMBEDDED</a>
</body>
</html>
```

ss.html

```
<html><body>cascading style sheet</body></html>
```

internal.html

```
<html>
<body style="background-color:pink">
<p style="text-indent:30pt;color:blue;font-family:arial">
Inline style is the style attached to one spacific element.
```

</p></body></html>

external.html

```
<html><head><link rel="stylesheet" href="style1.css" type="text/css"></head>
<body>
<p>External style sheet is a template document or file containing style information which can be linked with any number of documents</p></body></html>
```

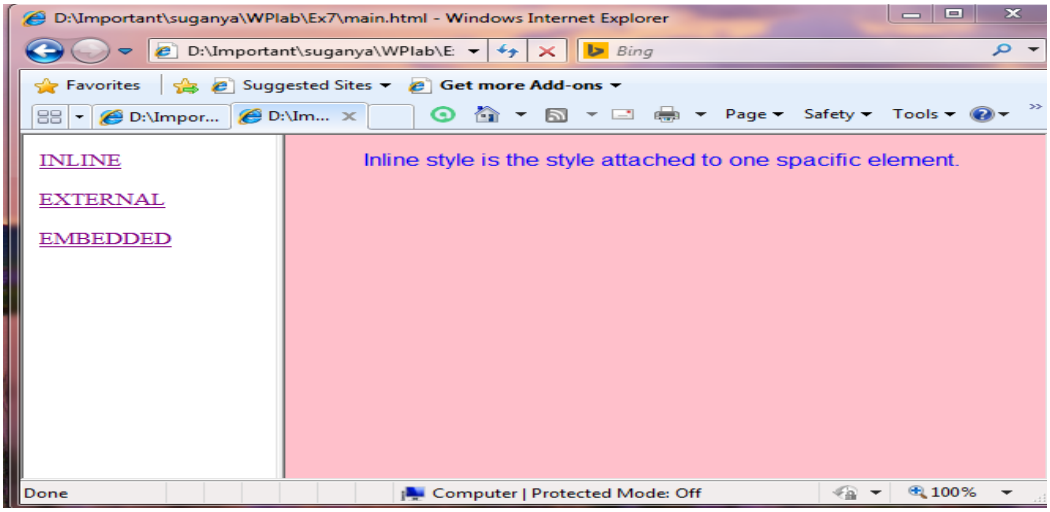
style1.css

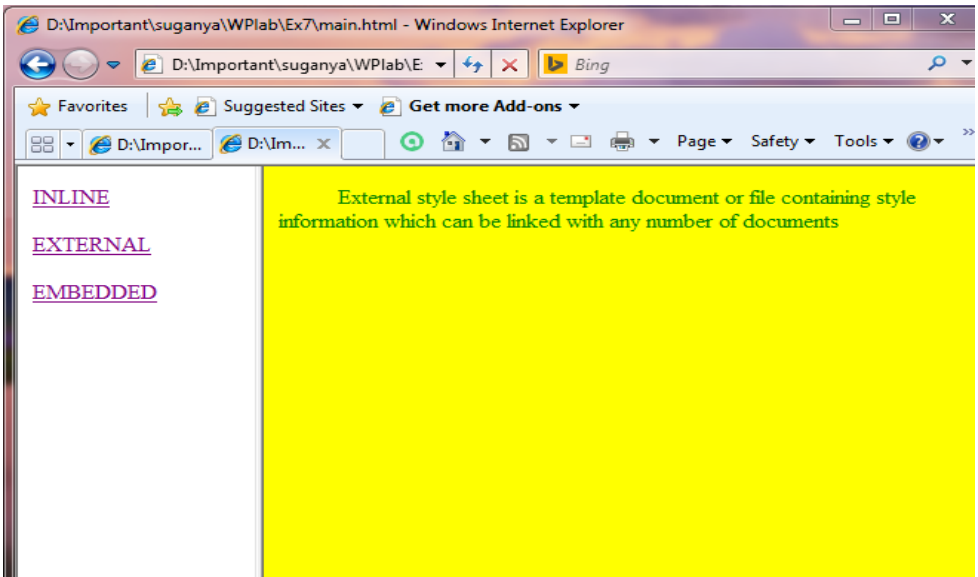
```
body{background-color:yellow}
p{text-indent:30pt;color:green;font-family:TimesNewRoman}
```

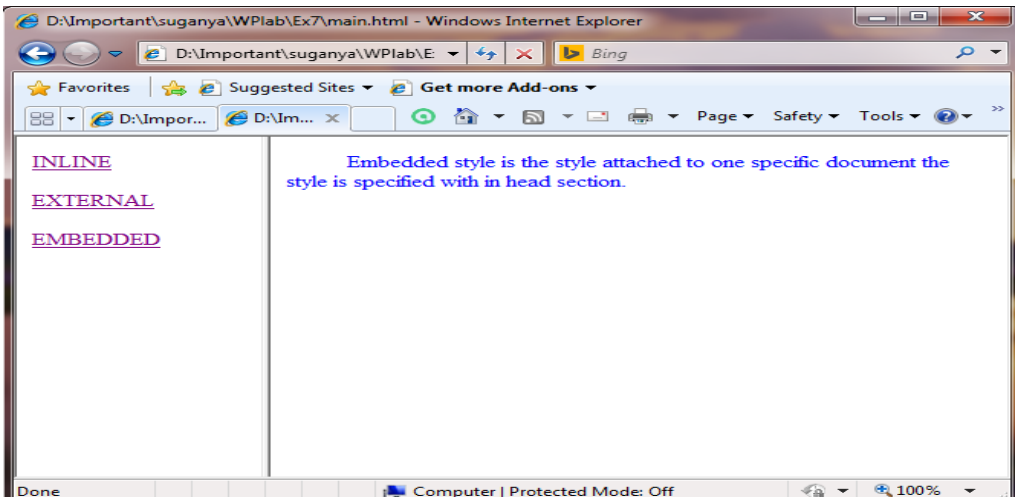
embedded.html

```
<html><head><style type="text/css">p{text-indent:30pt;color:blue;}</style><head>
<body><p>Embedded style is the style attached to one specific document the style is specified with in head section.
</p></body></html>
```

OUTPUT







RESULT

Thus, the website has been created using Cascading Style sheets.

EXPT NO:3	**VALIDATING WEB FORM USING DHTML**
DATE:	

AIM

To write the HTML codes using JAVA Script and CSS to create Client Side Scripts for Validating Web Form Controls.

ALGORITHM

1. Open Netbeans IDE, Select **File** -> **New Project**
2. Select **Java Web** -> **Web Application**, then click on Next
3. Give a name to your project and click on Next and then, Click **Finish**
4. The complete directory structure required for the Servlet Application will be created automatically by the IDE

5. Create the HTML header and give the title as “WebForm”.
6. Specify the style type as “text/css”.
7. Define the properties for the Layout and Layer.
8. Specify the script type as “text/javascript”.
9. Create a function as “validate()” and “cardnumber()”.
10. Specify the conditions for the form to be created using javascript.
11. Open the body of the HTML.
12. Create the division as “Layer”.
13. Create a “Submit” button and make a link to the function using onclick=“validate()”.

    onclick=“ cardnumber ()”.

    Save and run the HTML file to get the output.

Index.html

```
<!DOCTYPE html>

<html>
   <head>
      <title>Validating JavaScript</title>
      <meta charset="UTF-8">
      <meta name="viewport" content="width=device-width, initial-scale=1.0"

<style type="text/css">

#Layer1 {
        position:absolute;
        width:1047px;
        height:792px;
        z-index:1;
        left: 103px;
        top: 80px;
        }

.style1 {
        color: #000099;
        font-weight: bold;
        background-color:#00CCFF;
        }

.style2 {
        color: #000099;
        font-weight: bold;
```

```
        background-color:#00CCFF;
        }

#Layer2 {
        position:absolute;
        width:1040px;
        height:49px;
        z-index:2;
        left: 59px;
        top: 9px;
        }

.style3 {
        color: #006666;
        font-weight: bold;
        background-color:#E0D2F0;
}

body
        {
        background-color:#DADADA;
        }
</style>

<script type="text/javascript">

function validation()
      {
      if(document.validate.name.value=="")
      {
         alert("enter the full name")
         document.validate.name.focus();
         return false
      }
      if(!isNaN(document.validate.name.value))
      {
         alert("enter the valid name");
         document.validate.name.focus();
         document.validate.name.value="";
         return false
      }
      if(document.validate.day.value=="0")
      {
         alert("enter the day");
         document.validate.day.focus();
         return false
      }
      if(document.validate.month.value=="0")
      {
         alert("enter the month");
```

```
    document.validate.month.focus();
    return false
}
if(document.validate.year.value=="0")
{
    alert("enter the year");
    document.validate.year.focus();
    return false
}
if(document.validate.gender.value=="0")
{
    alert("enter the gender")
    document.validate.gender.focus();
    return false
}
if(document.validate.address.value=="")
{
    alert("enter the address")
    document.validate.address.focus();
    return false
}
if(document.validate.city.value=="")
{
    alert("enter the city")
    document.validate.city.focus();
    return false
}
if(!isNaN(document.validate.city.value))
{
    alert("enter the valid City")
    document.validate.city.focus();
    document.validate.city.value="";
    return false
}
if(document.validate.state.value=="")
{
    alert("enter the state")
    document.validate.state.focus();
    return false
}
if(!isNaN(document.validate.state.value))
{
    alert("enter the valid state")
    document.validate.state.focus();
    document.validate.state.value="";
    return false
}
if(document.validate.pincode.value=="")
{
    alert("enter the pincode ")
```

```
    document.validate.pincode.focus();
    return false
}
if( isNaN(document.validate.pincode.value))
{
    alert("enter a valid pincode")
    document.validate.pincode.focus();
    return false
}
if(document.validate.pincode.value.length!=6)
{
    alert("please enter the valid pincode");
    document.validate.pincode.focus();
    return false
}
if(document.validate.address.value=="")
{
    alert("enter the address")
    document.validate.address.focus();
    return false
}
if(document.validate.email.value=="")
{
    alert("enter the email id")
    document.validate.email.focus();
    return false
}
if(!(document.validate.email.value==""))
{
    var x=document.validate.email.value
    var atpos=x.indexOf("@");
    var dotpos=x.lastIndexOf(".");
    if (atpos<1 || dotpos<atpos+2 || dotpos+2>=x.length)
        {
            alert("Not a valid e-mail address");
            document.validate.email.focus();
            return false;
        }
}
if(document.validate.mobile.value=="")
{
    alert("enter the mobile no")
    document.validate.mobile.focus();
    return false
}
if( isNaN(document.validate.mobile.value))
{
    alert("enter a valid mobile no");
    document.validate.mobile.focus();
    document.validate.mobile.value="";
```

```
            return false;
        }
        if(document.validate.mobile.value.length !=10)
        {
            alert("enter the valid mobile no")
            document.validate.mobile.focus();
            document.validate.mobile.select();
            return false
        }

        window.confirm("Registration form submitted successfully...");

}


function cardnumber(inputtxt)
{
  var cardno = /^(?:3[47][0-9]{13})$/;
  if(inputtxt.value.match(cardno))
        {
      return true;
        }
      else
        {
        alert("Not a valid Amercican Express credit card number!");
        document.inputtxt.focus();
        document.inputtxt.select();
        return false;
        }
}
</script>
</head>

<body>

  <div id="Layer1">
  <form id="validate" name="validate" method="post" action="">

    <p> </p>

<table width="886" border="0" cellspacing="2" cellpadding="2">

<tr>
     <td colspan="2">
            <div align="center" class="style1">Students Details </div>
    </td>
    <td width="30" rowspan="10"> </td>
     <td colspan="2">
            <div align="center" class="style2">Payment Details </div></td>
</tr>
```

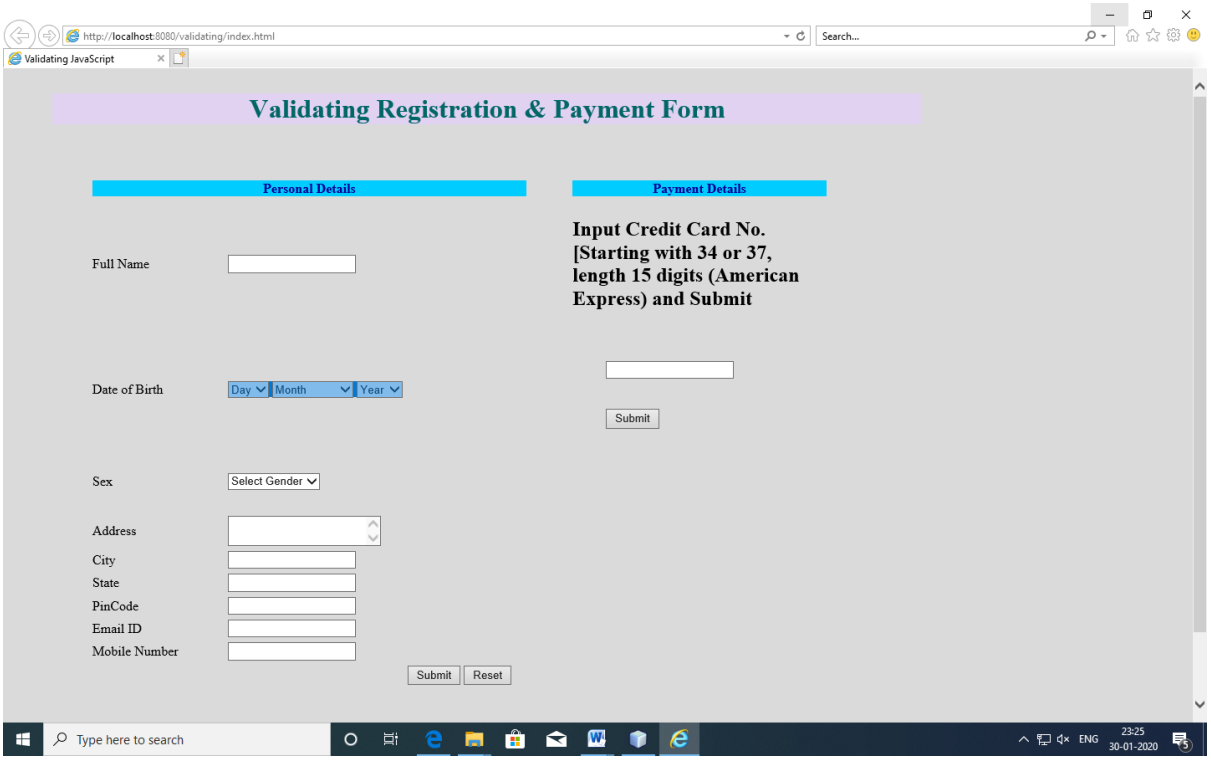
```
<tr>
          <td width="111">Full Name</td>
          <td width="255"><label>
          <input name="name" type="text" id="name" />
          </label></td>
          <td width="217">
           <h2>Input Credit Card No.[Starting with 34 or 37, length 15 digits (American Express) and
    Submit</h2>
      </td>
</tr>

<tr>
      <td>Date of Birth </td>
      <td>

      <select name="day">
      <option value="0">Day</option>
      <option value="1">1</option>
      <option value="2">2</option>
       <option value="3">3</option>
       <option value="4">4</option>
       <option value="5">5</option>
       <option value="6">6</option>
       <option value="7">7</option>
       <option value="8">8</option>
       <option value="9">9</option>
       <option value="10">10</option>
       <option value="11">11</option>
       <option value="12">12</option>
       <option value="13">13</option>
       <option value="14">14</option>
       <option value="15">15</option>
       <option value="16">16</option>
       <option value="17">17</option>
       <option value="18">18</option>
       <option value="19">19</option>
       <option value="20">20</option>
       <option value="21">21</option>
       <option value="22">22</option>
       <option value="23">23</option>
       <option value="24">24</option>
       <option value="25">25</option>
       <option value="26">26</option>
       <option value="27">27</option>
       <option value="28">28</option>
       <option value="29">29</option>
       <option value="30">30</option>
       <option value="31">31</option>
      </select>
```

```
<select name="month">
 <option value="0">Month</option>
      <option value="1">Janauray</option>
      <option value="2">Feburary</option>
      <option value="3">March</option>
      <option value="4">April</option>
      <option value="5">May</option>
      <option value="6">June</option>
      <option value="7">July</option>
      <option value="8">August</option>
      <option value="9">Sepetember</option>
      <option value="10">October</option>
      <option value="11">November</option>
      <option value="12">December</option>
  </select>


  <select name="year">
      <option value="0">Year</option>
      <option value="1">2009</option>
      <option value="2">2008</option>
      <option value="3">2007</option>
      <option value="4">2006</option>
      <option value="5">2005</option>
      <option value="6">2004</option>
      <option value="7">2003</option>
      <option value="8">2002</option>
      <option value="9">2001</option>
      <option value="10">2000</option>
      <option value="11">1999</option>
      <option value="12">1998</option>
      <option value="13">1997</option>
      <option value="14">1996</option>
      <option value="15">1997</option>
      <option value="16">1996</option>
      <option value="17">1995</option>
      <option value="18">1994</option>
      <option value="19">1993</option>
      <option value="20">1992</option>
      <option value="21">1991</option>
      <option value="22">1990</option>
      <option value="23">1989</option>
      <option value="24">1988</option>
      <option value="25">1987</option>
      <option value="26">1986</option>
      <option value="27">1985</option>
      <option value="28">1984</option>
      <option value="29">1983</option>
      <option value="30">1982</option>
```

```
        <option value="31">1981</option>
        <option value="32">1980</option>
      </select></td>

 <td>
 <ul>
     <h1>
        <input background-color:lightyellow type='text' name='text1'/>
     </h1>
     <h1>
                        <input type="submit" name="submit" value="Submit"
                onclick="cardnumber(document.validate.text1)"/>
      </h1>
</ul>

</td>
 </tr>


  <tr>
      <td height="70">Sex</td>
      <td>
        <select name="gender" id="gender" >
       <option value="0">Select Gender</option>
       <option value="1">Male</option>
       <option value="2">Female</option>
      </select>
</td>
</tr>

<tr>
      <td>Address</td>
      <td><label>
       <textarea name="address" id="address"></textarea>
      </label></td>

</tr>

<tr>
      <td>City</td>
      <td>
        <label>
       <input name="city" type="text" id="city" />
      </label>
        </td>
      <td colspan="2" rowspan="5"> </td>

 </tr>

<tr>
```

```
        <td>State</td>
        <td><label>
          <input name="state" type="text" id="state" />
        </label></td>

</tr>

<tr>
        <td>PinCode</td>
        <td><label>
          <input name="pincode" type="text" id="pincode" />
        </label></td>

</tr>

<tr>
        <td>Email ID</td>
        <td><label>
          <input name="email" type="text" id="email" />
        </label></td>

</tr>

<tr>
        <td>Mobile Number</td>
        <td><label>
          <input name="mobile" type="text" id="mobile" />
        </label></td>

</tr>

 <tr>
        <td colspan="5"><label>
          <div align="center">
         <input type="submit" name="Submit" value="Submit" onclick="return validation()"  />
            <label>
            <input type="reset" name="Submit2" value="Reset" />
            </label>
          </div>
        </label></td>

 </tr>

</table>

  </form>
</div>

<div id="Layer2">
  <div align="center">
```

```
    <h1 class="style3">Validating Registration & Payment Form </h1>
  </div>
</div>
    </body>
</html>
```



RESULT

Thus program to validate web form using DHTML has been written & executed successfully.

EXPT NO:4A	Invoke servlets HTML Forms in Java source Coding
DATE:	

Aim

To invoke servlets from HTML Forms using netbeans

Algorithm:

create a servlet application in Netbeans IDE, you will need to follow the following (simple) steps :

14. Open Netbeans IDE, Select **File** -> **New Project**
15. Select **Java Web** -> **Web Application**, then click on Next
16. Give a name to your project and click on Next and then, Click **Finish**
17. The complete directory structure required for the Servlet Application will be created automatically by the IDE
18. To create a Servlet, open **Source Package**, right click on **default packages** -> **New** -> **Servlet**.
19. Give a Name to your Servlet class file and servlet name and check additional information to deployment descriptor(web.xml)
20. Now, your Servlet class is ready, and you just need to change the method definitions and you will good to go.
21. Write some code inside your Servlet class
22. Create an HTML file, right click on **Web Pages** -> **New** -> **HTML**
23. Give it a name. We recommend you to name it `index`, because browser will always pick up the `index.html` file automatically from a directory. Index file is read as the first page of the web application.
24. Write some code inside your HTML file. We have created a hyperlink to our Servlet in our HTML file.
25. Edit **web.xml** file. In the web.xml file you can see, we have specified the **url-pattern** and the **servlet-name**, this means when `hello` url is accessed our Servlet file will be executed.
26. Run your application, right click on your Project and select **Run**

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>
      <div>

        <h2>Click here to invoke servlet from HTML<a href="MyServlet">Click here Servlet Page</a></h2>
</div>
  </body>
</html>
```

MyServlet.java

```
import java.io.*;
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

public class MyServlet extends HttpServlet {


  protected void processRequest(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException
 {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
      out.println("<!DOCTYPE html>");
      out.println("<html>");
      out.println("<head>");
      out.println("<title>Servlet MyServlet SHEIK</title>");
      out.println("</head>");
      out.println("<body>");
      out.println("<h1>Servlet MyServlet at " + request.getLocalName() + "</h1>");
      out.println("</body>");
      out.println("</html>");
    }
  }

  @Override
  protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException
  {
    processRequest(request, response);
   response.setContentType("text/html;charset=UTF-8");

  }

  @Override
```

```
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException
    {
        processRequest(request, response);
    }

    @Override
    public String getServletInfo() {
        return "Short description";
    }// </editor-fold>

}
```

Web.xml

web.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app version="3.1" xmlns="http://xmlns.jcp.org/xml/ns/javaee" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/xml/ns/javaee/web-app_3_1.xsd">
    <servlet>
        <servlet-name>MyServlet</servlet-name>
        <servlet-class>MyServlet</servlet-class>
    </servlet>
    <servlet-mapping>
        <servlet-name>MyServlet</servlet-name>
        <url-pattern>/MyServlet</url-pattern>
    </servlet-mapping>
    <welcome-file-list>
        <welcome-file>
            index.html
        </welcome-file>
    </welcome-file-list>
    <session-config>
        <session-timeout>
            30
        </session-timeout>
    </session-config>
</web-app>
```

RESULT:

Thus program to invoke servlets from HTML Forms using netbeans has been executed successfully.

EXPT NO:4B	**Session tracking using hidden form fields and Session tracking for a hit count**
DATE:	

Aim

To Create a Session tracking using hidden form fields and Session tracking for a hit count.

Algorithm

create a servlet application in Netbeans IDE, you will need to follow the following (simple) steps :

1. Open Netbeans IDE, Select **File** -> **New Project**
2. Select **Java Web** -> **Web Application**, then click on Next
3. Give a name to your project and click on Next and then, Click **Finish**
4. The complete directory structure required for the Servlet Application will be created automatically by the IDE
5. To create two Servlet, open **Source Package**, right click on **default packages** -> **New** -> **Servlet. Myservlet.java** for doPost **and MyServlet2.java** for doGet
6. Give a Name to your Servlet class file and servlet name and check additional information to deployment descriptor(web.xml)
7. Now, your Servlet class is ready, and you just need to change the method definitions and you will good to go.
8. Write some code inside your Servlet class
9. Create an HTML file, right click on **Web Pages** -> **New** -> **HTML**

10. Give it a name. We recommend you to name it index, because browser will always pick up the index.html file automatically from a directory. Index file is read as the first page of the web application.
11. Write some code inside your HTML file. We have created a hyperlink to our Servlet in our HTML file.
12. Edit **web.xml** file. In the web.xml file you can see, we have specified the **url-pattern** and the **servlet-name**, this means when hello url is accessed our Servlet file will be executed.
13. Run your application, right click on your Project and select **Run**

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>
      <div>
       <form action="MyServlet">
       Name:<input type="text" name="userName"/><br/>
       <input type="submit" value="go"/>
         </form>
    </div>
  </body>
</html>
```

MyServlet.java

```
import java.io.*;
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

public class MyServlet extends HttpServlet {


   private int iHitCounter;
```

```
@Override
 public void init() throws ServletException
 {
     iHitCounter = 0;
 }
protected void processRequest(HttpServletRequest request, HttpServletResponse response)
       throws ServletException, IOException {
   response.setContentType("text/html;charset=UTF-8");
   try (PrintWriter out = response.getWriter()) {
       out.println("<!DOCTYPE html>");
       out.println("<html>");
       out.println("<head>");
       out.println("<title>Servlet MyServlet SHEIK</title>");
       out.println("</head>");
       out.println("<body>");
       out.println("<h1>Servlet MyServlet at " + request.getLocalName() + "</h1>");
       out.println("</body>");
       out.println("</html>");
   }
}

@Override
protected void doGet(HttpServletRequest request, HttpServletResponse response)
       throws ServletException, IOException
{
  //processRequest(request, response);
 //response.setContentType("text/html;charset=UTF-8");
   //try (PrintWriter out = response.getWriter()) {
       /* TODO output your page here. You may use following sample code. */
      // out.println("<h2> Welcome</h2>");

   //}

   PrintWriter out = response.getWriter();
  response.setContentType("text/html;charset=UTF-8");
   String n=request.getParameter("userName");
   out.print("Welcome "+n);

   //creating form that have invisible textfield
   out.print("<form action='MyServlet2'>");
   out.print("<input type='hidden' name='uname' value='"+n+"'>");
   out.print("<input type='submit' value='go'>");
   out.print("</form>");
```

```
      // PrintWriter out =  response.getWriter();
         out.println("<form><fieldset style='width:15%'>");
         out.println("<h3>Welcome to my website !</h3><hr>");
         out.println("You are visitor number: "+ (++iHitCounter));
         out.println("</fieldset></form>");
          out.close();


    }

    /**
     * Handles the HTTP <code>POST</code> method.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     */
    @Override
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException
    {
      // processRequest(request, response);
       doGet(request, response);

    }

    /**
     * Returns a short description of the servlet.
     *
     * @return a String containing servlet description
     */
    @Override
    public String getServletInfo() {
       return "Short description";
    }// </editor-fold>

}
```

MyServlet2.java

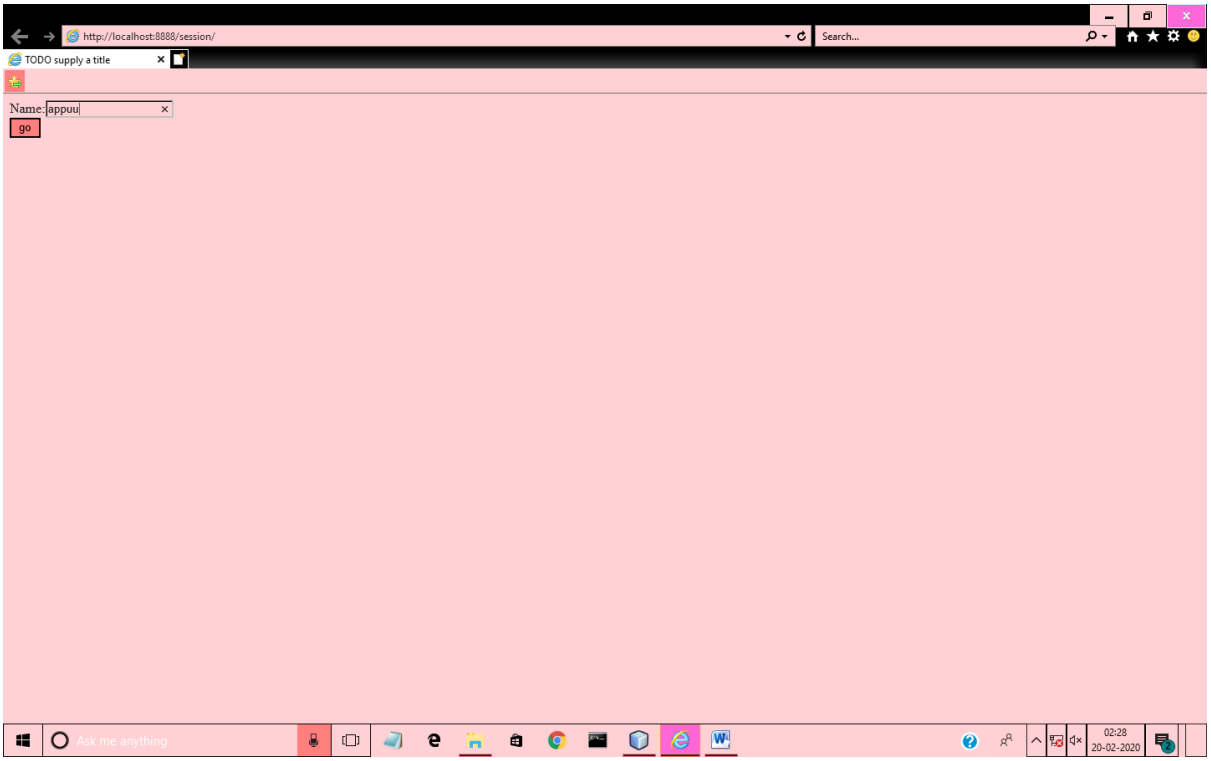
```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
```

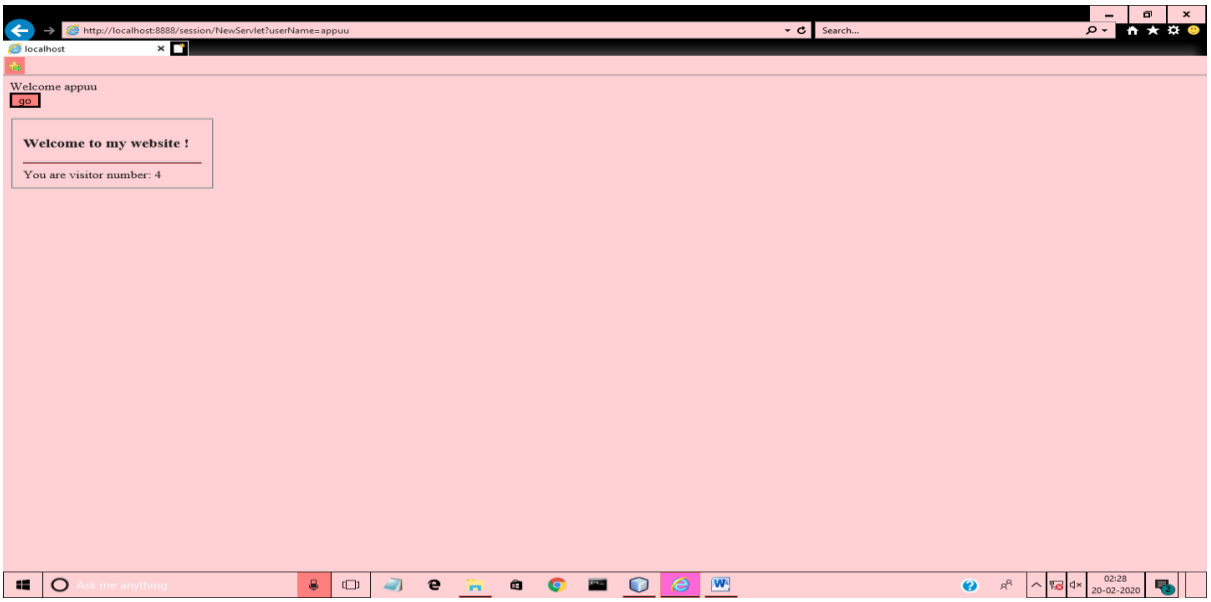
```
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 *
 * @author GCES-CSE
 */
public class MyServlet2 extends HttpServlet {

   /**
    * Processes requests for both HTTP <code>GET</code> and <code>POST</code>
    * methods.
    *
    * @param request servlet request
    * @param response servlet response
    * @throws ServletException if a servlet-specific error occurs
    * @throws IOException if an I/O error occurs
    */
   protected void processRequest(HttpServletRequest request, HttpServletResponse response)
           throws ServletException, IOException {
      response.setContentType("text/html;charset=UTF-8");
      try (PrintWriter out = response.getWriter()) {
         /* TODO output your page here. You may use following sample code. */
         out.println("<!DOCTYPE html>");
         out.println("<html>");
         out.println("<head>");
         out.println("<title>Servlet MyServlet2</title>");
         out.println("</head>");
         out.println("<body>");
         out.println("<h1>Servlet MyServlet2 at " + request.getContextPath() + "</h1>");
         out.println("</body>");
         out.println("</html>");
      }
   }
   @Override
   protected void doGet(HttpServletRequest request, HttpServletResponse response)
           throws ServletException, IOException {
       PrintWriter out = response.getWriter();

      //Getting the value from the hidden field
      String n=request.getParameter("uname");
      out.print("Hello "+n);

      out.close();
   }

   @Override
   protected void doPost(HttpServletRequest request, HttpServletResponse response)
           throws ServletException, IOException {
      processRequest(request, response);
   }
```

```
    /**
     * Returns a short description of the servlet.
     *
     * @return a String containing servlet description
     */
    @Override
    public String getServletInfo() {
        return "Short description";
    }// </editor-fold>

}
```

web.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app version="3.1" xmlns="http://xmlns.jcp.org/xml/ns/javaee" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/xml/ns/javaee/web-app_3_1.xsd">
    <servlet>
        <servlet-name>MyServlet</servlet-name>
        <servlet-class>MyServlet</servlet-class>
    </servlet>
    <servlet>
        <servlet-name>MyServlet2</servlet-name>
        <servlet-class>MyServlet2</servlet-class>
    </servlet>
    <servlet-mapping>
        <servlet-name>MyServlet</servlet-name>
        <url-pattern>/MyServlet</url-pattern>
    </servlet-mapping>
    <welcome-file-list>
        <welcome-file>
            index.html
        </welcome-file>
    </welcome-file-list>
    <servlet-mapping>
        <servlet-name>MyServlet2</servlet-name>
        <url-pattern>/MyServlet2</url-pattern>
    </servlet-mapping>
    <session-config>
        <session-timeout>
            30
        </session-timeout>
    </session-config>
</web-app>
```





RESULT:

Thus program to create a Session tracking using hidden form fields and hit count has been tracking successfully.

EXPT NO:5	**Create three-tier applications using JSP and Databases for conducting on-line examination and displaying student mark list in Java**
DATE:	

AIM

To implement the three-tier application using servlets to display Student mark list.

ALGORITHM

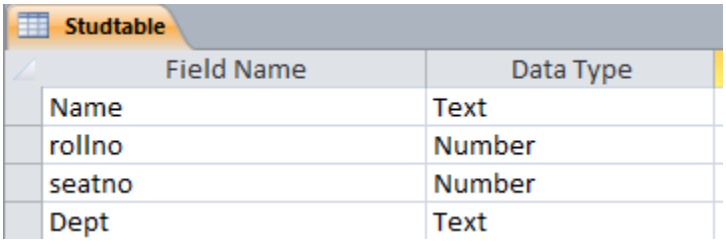
- Start the three-tier application in servlets.
- Create the form index.html to enter student marks with Login button.
- Use the Form post method.
- Click login button to invoke login servlet to fetch and check the details from the StudExamdb.accdb Ms access database.
- Create the form index1.html to conducting online exam and submit the answer by using Submit button.
- Use the Form post method.
- Click submit button to invoke insert servlet to fetch and check the details from the StudExamdb.accdb Ms access database.
- Use jdbc:ucanaccess: Exam.accdb to connect with the database.
- Stop the program.

Steps for Creating Database and table for this Program:

1.Create Ms Access File in StudExamDB.accdb

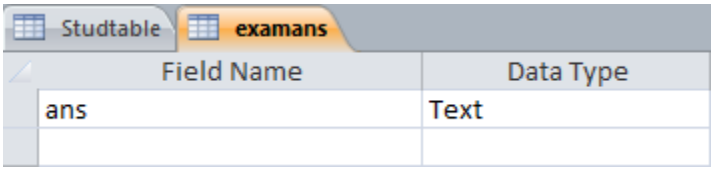
2.Then Open it .

3.Create the table in the name of Studtable and examans With following columns



Studtable

Field Name	Data Type
Name	Text
rollno	Number
seatno	Number
Dept	Text



Studtable | examans

Field Name	Data Type
ans	Text

Index.html (Login)

```
<!DOCTYPE html>
<html>
   <head>
      <title>login form</title>

   </head>
   <body>

      <form name="form1" method="post" action="login">
         <h1>roll no:</h1>
         <input type="text" name="rollno" /><br/>
         <h1>Seat no:</h1>
      <input type="text" name="seatno" /><br/>
      <input type="submit" value="login" />

       </form>

   </body>
</html>
```

Login.java (servlet)

```
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.*;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import java.sql.*;
import java.util.logging.Level;
import java.util.logging.Logger;

public class login extends HttpServlet {

    Connection conn=null;
    Statement stmt=null;
    ResultSet rs=null;

    @Override
    public void init(ServletConfig config)throws ServletException
    {
        super.init(config);
    try
    {
        String database="D:/ex5/StudExamDB.accdb";
        Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");
        conn=DriverManager.getConnection("jdbc:ucanaccess://"+database);
        stmt=conn.createStatement();
    }
```

```
    catch(ClassNotFoundException | SQLException e)
    {
        System.out.println("Driver not connected Error :"+e);
    }
    }

    protected void processRequest(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException, SQLException
        {
        response.setContentType("text/html;charset=UTF-8");
        try (PrintWriter out = response.getWriter())
        {

            int count=0;
            /* TODO output your page here. You may use following sample code. */
            int rollno = Integer.parseInt(request.getParameter("rollno"));
            int seatno = Integer.parseInt(request.getParameter("seatno"));
            rs=stmt.executeQuery("select * from Studtable where rollno="+rollno+" and
seatno="+seatno+"");
            while(rs.next())
            {
               count++;

            }
            if(count==1)
            {
                String site = new String("http://localhost:8080/Onlineexam/index1.html");
                response.setStatus(response.SC_MOVED_TEMPORARILY);
                response.setHeader("Location", site);
            }
            else
```

```
            {
                out.println("Login Error");
            }
        }
    }

    @Override
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        try {
            processRequest(request, response);
        } catch (SQLException ex) {
            Logger.getLogger(login.class.getName()).log(Level.SEVERE, null, ex);
        }
    }

    @Override
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        try {
            processRequest(request, response);
        } catch (SQLException ex) {
            Logger.getLogger(login.class.getName()).log(Level.SEVERE, null, ex);
        }
    }
    @Override
    public String getServletInfo() {
        return "Short description";
    }// </editor-fold>
}
```

Index1.html

```
<!DOCTYPE html>

<html>
<head>
<title>online Exam</title>
<script>
function validate()
{
document.form1.submit();
}
</script>
</head>
<body>
<center>
<form name="form1" method="post" action="insert">

<table>
  <tr>
    <td>
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">CharlesBabbage
<input type="radio" name="ans1" value="Napier">Napier
<br/><br/>
</td>
  </tr>

 <tr>
  <td>
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/>
</td>
 </tr>

<tr>
   <td>
3.C was developed by?
<br/>
<input type="radio" name="ans3" value="Dennis Ritchie">DennisRitchie
<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/>
```

```
<input type="submit" name="Submit" value="Submit">
</td></tr>

</table>

</form>
 </center>

</body>
</html>
```

insert.java (servlet)

```
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.*;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import java.sql.*;
import java.util.logging.Level;
import java.util.logging.Logger;



public class insert extends HttpServlet {

    Connection conn=null;
    Statement stmt=null;
    ResultSet rs=null;


    @Override
    public void init(ServletConfig config)throws ServletException
    {
        super.init(config);

    try
    {
        String database="D:/ex5/StudExamDB.accdb";
        Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");
        conn=DriverManager.getConnection("jdbc:ucanaccess://"+database);
        stmt=conn.createStatement();
    }

    catch(ClassNotFoundException | SQLException e)
```

```
{
    System.out.println("Driver not connected Error :"+e);
}

}

protected void processRequest(HttpServletRequest request, HttpServletResponse response)
      throws ServletException, IOException, SQLException

{
   response.setContentType("text/html;charset=UTF-8");
   PrintWriter out = response.getWriter();
   String str1=request.getParameter("ans1");
   String str2=request.getParameter("ans2");
   String str3=request.getParameter("ans3");

   try
   {
   rs=stmt.executeQuery("SELECT * FROM examans");
   int mark=0;
   int i=1;
   while(rs.next())
   {
      if(i==1)
      {
         String dbans1=rs.getString(1);
         if(str1.equals(dbans1))
            {
              mark=mark+5;
            }

      }
     if(i==2)
      {
         String dbans2=rs.getString(1);
         if(str2.equals(dbans2))
            {
            mark=mark+5;
            }

      }
     if(i==3)
      {
         String dbans3=rs.getString(1);
         if(str3.equals(dbans3))
           {
            mark=mark+5;
           }

      }
```

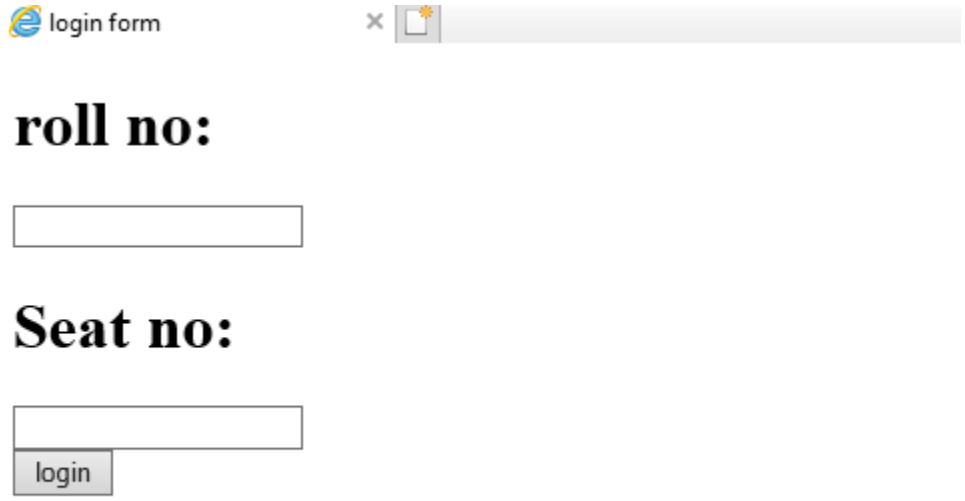
```
     ++i;

       }

    if(mark >= 10)
      {
         out.println("<h4>Your Mark Is : "+mark+"</h4>");
         out.println("<h3>Congratulations....! You Are Eligible For The Next Round...</h3>");
      }
      else
      {
         out.println("<h4>Your Mark is : "+mark+"</h4>");
         out.println("<h3>Sorry....!! You Are Not Eligible For  The Next Round...</h3>");
      }
   }

   catch(Exception e)
   {
   System.out.println("SQLException :"+e);
   }


   }

@Override
protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException
{
   try {
      processRequest(request, response);
   } catch (SQLException ex) {
      Logger.getLogger(insert.class.getName()).log(Level.SEVERE, null, ex);
   }
}

@Override
protected void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
   try {
      processRequest(request, response);
   } catch (SQLException ex) {
      Logger.getLogger(insert.class.getName()).log(Level.SEVERE, null, ex);
   }
}

@Override
public String getServletInfo() {
   return "Short description";
}// </editor-fold>
```

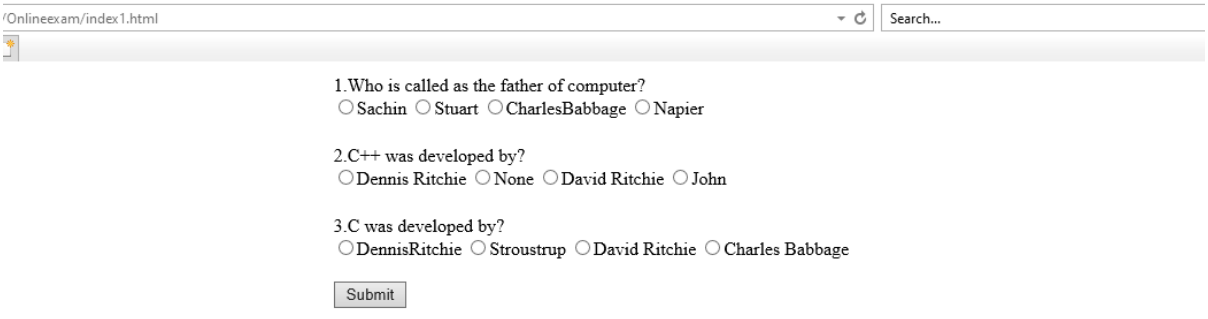
}

Web.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app version="3.1" xmlns="http://xmlns.jcp.org/xml/ns/javaee"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/xml/ns/javaee/web-
app_3_1.xsd">
   <servlet>
      <servlet-name>insert</servlet-name>
      <servlet-class>insert</servlet-class>
   </servlet>
   <servlet>
      <servlet-name>login</servlet-name>
      <servlet-class>login</servlet-class>
   </servlet>
   <servlet-mapping>
      <servlet-name>insert</servlet-name>
      <url-pattern>/insert</url-pattern>
   </servlet-mapping>
   <welcome-file-list>
      <welcome-file>index.html</welcome-file>
   </welcome-file-list>
   <servlet-mapping>
      <servlet-name>login</servlet-name>
      <url-pattern>/login</url-pattern>
   </servlet-mapping>
   <session-config>
      <session-timeout>
         30
      </session-timeout>
   </session-config>
</web-app>
```

Output:


login form
roll no:
Seat no:
login


/Onlineexam/index1.html
Search...
1.Who is called as the father of computer?
Sachin Stuart CharlesBabbage Napier
2.C++ was developed by?
Dennis Ritchie None David Ritchie John
3.C was developed by?
DennisRitchie Stroustrup David Ritchie Charles Babbage
Submit

RESULT

Thus the online exam web application to implement three tier architecture using servlet has been executed successfully.

EXPT NO:6	**Shopping Cart using TOMCAT SERVER**
DATE:	

AIM:

Install TOMCAT web server. Convert the static webpages dynamic webpages using jsp. Hint: Users information (user id) would be stored in web.xml. Each user should have a separate Shopping Cart.

PROCEDURE:

Steps

1. Double click the exe file and follow the steps by clicking next.
   a. The easiest way is to simply download and run the 32-bit/64-bit Windows Service Installer of the latest version on Apache Tomcat. In my case the latest version of Apache Tomcat is 7 and the download link is :
   b. http://mirrors.hostingromania.ro/apache.org/tomcat/tomcat-7/v7.0.26/bin/apache-tomcat-7.0.26.exe
   c. Download and install tomcat If you now click on **Next** and to set port 9999

2. Tomcat uses an environment variable named JAVA_HOME to indicate the location of the JAVA directory.
3. Additionally it uses another environment variable named CATALINA_HOME to indicate the location of Tomcat's Jakarta level directory.
4. In Windows XP (or equivalent) go to:
   a. Control Panel→System→Advanced→Environment Variables
   b. CATALINA_HOME c:\tomcat6\apache-tomcat-6.0.20
   c. JAVA_HOME c:\program files\java\jdk1.6
5. Save the modifications and re-boot your computer to apply the new environment variable settings.
6. This can be tested from the command prompt (Start→Run and type cmd<Enter>) by typing ECHO followed by a space and then the variable enclosed inside a pair of % characters
   (e.g. ECHO % JAVA_HOME%).

Starting and Stopping the server:
This is done via two batch files – startup and shutdown
They can be found in the Tomcat bin folder. It is recommended you create a shortcut for each and place on your desktop.
Start the server by running the startup batch file – you should get a display like this:

7. Next test that the server can run a JSP page.

In the webapps\ROOT\ folder you will find an index.jsp file.

a. The ROOT folder is where the JSP pages need to live.
b. Open your web browser and in offline mode type the following in the url text box:
c. http://localhost:8080/index.jsp

8. 9. If the page does not appear then there is a problem and you should check all the steps you have made.
9. 10.Finally, shut down the server when not in use by simply running the shut down batch file.

To create a JSP web page in the Netbeans IDE we must do the following three main steps:

1. Start by creating a "Java web" -> "web application project".
    1. Open the Netbeans IDE to start your project.
    2. Now click on file menu and select New Project then select Java Web and then Web Application
    3. Now click on "Next". A new window is generated with a default project name. Now change the name (I used "JspWebApplication") according to your project and click on "Next"
    4. Now a new window is generated for the server and setting the wizard. First go to the server and click on "Add server". Since I already set up the Tomcat Server.
    5. Server and Setting wizard
    6. First you need to configure Apache Tomcat Server 7.0.40

2. Create a JSP web file and xml file.
    1. login.jsp
    2. LoginCheck.jsp
    3. index.jsp
    4. cart.jsp
    5. remove.jsp
    6. users.xml

3. Last and finally, start the Tomcat Server and deploy the project.

Coding :

Login.jsp

```
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8"> <title>JSP
Page</title>
</head>
<body>

<center>
<h1>Login Page</h1>
<form action="LoginCheck.jsp" method="post"> <br/>uid:
<input type="text" name="username">  <br/>
<br/>
<br/>
<input type="submit" value="Submit">
</form>
</center>
</body>
</html>
```

LoginCheck.jsp

```
<!Doctype html>
<%@page contentType="text/html" pageEncoding="UTF-8"%>

<%@ page
import="javax.xml.parsers.DocumentBuilderFactory,javax.xml.parsers.DocumentB
uilder,org.w3c.dom.*"%>
<%
DocumentBuilderFactory dbf = DocumentBuilderFactory.newInstance();
```

```
DocumentBuilder db = dbf.newDocumentBuilder();
Document doc =
db.parse("C://Users/gces/Documents/NetBeansProjects/WebApplication1/web/us
ers.xml");
NodeList nl= doc.getElementsByTagName("uid");
%>
<html>
<head>
 <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>JSP Page</title>
 </head>
<body>
 <% String username=request.getParameter("username");
String uid=nl.item(0).getFirstChild().getNodeValue();
if(username.equals(uid))
{
   session.setAttribute("username",username);
 response.sendRedirect("index.jsp");
}
else
    out.println("Error");
 %>
</body>
 </html>
```

Index.jsp

```
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>



<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>Shopping cart</title>
```

```
<style>
* { font-size: 12px; font-family: Verdana }
input { border: 1px solid #ccc }
</style>

</head>

<body>

<jsp:declaration>
java.util.Enumeration parms;
java.util.Enumeration values;
</jsp:declaration>

<jsp:scriptlet>
parms = request.getParameterNames();
values = request.getParameterNames();


while(parms.hasMoreElements()) {
   String name = (String) parms.nextElement();
   String value = (String) values.nextElement();
   session.setAttribute(name, value);
}

</jsp:scriptlet>


<img src="images/add.png" onclick="document.location='index.jsp'">
<img src="images/remove.jpg" onclick="document.location='remove.jsp'">
<img src="images/cart.jpg" onclick="document.location='cart.jsp'">


<h2>Add to shopping cart</h2>

<form method="get" action="index.jsp">

<table>

<tr>
<td><input type="checkbox" <% if (session.getAttribute("scissors") != null)
```

```
out.print("checked"); %> name="scissors"></td>
<td>Scissors</td>
</tr>

<tr>
<td><input type="checkbox" <% if (session.getAttribute("book") != null)
 out.print("checked"); %> name="book"></td>
<td>Book</td>
</tr>

<tr>
<td><input type="checkbox" <% if (session.getAttribute("pen") != null)
 out.print("checked"); %> name="pen"></td>
<td>Pen</td>
</tr>

<tr>
<td><input type="checkbox" <% if (session.getAttribute("bottle") != null)
 out.print("checked"); %> name="bottle"></td>
<td>Bottle</td>
</tr>

<tr>
<td><input type="checkbox" <% if (session.getAttribute("glass") != null)
out.print("checked"); %> name="glass"></td>
<td>Glass</td>
</tr>

</table>

<br><br>
<input type="submit" value="submit">
</form>


</body>
</html>
```

cart.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
   pageEncoding="ISO-8859-1"%>

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">

<html>
<head>
   <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>Shopping cart</title>
<style>
* { font-size: 12px; font-family: Verdana }
</style>
</head>



<img src="images/add.png" onclick="document.location='index.jsp'">
<img src="images/remove.jpg" onclick="document.location='remove.jsp'">
<img src="images/cart.jpg" onclick="document.location='cart.jsp'">


<h2>The shopping cart</h2>

<jsp:scriptlet><![CDATA[ java.util.Enumeration content = session.getAttributeNames();

while (content.hasMoreElements()) {
   out.println(content.nextElement());
   out.println("<br>");
}

 ]]></jsp:scriptlet>


</html>
```

remove.jsp

```
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<title>Shopping cart</title>
<style>

* { font-size: 12px; font-family: Verdana }
input { border: 1px solid #ccc }
</style>
</head>
<body>

<jsp:declaration>
java.util.Enumeration parms;
</jsp:declaration>

<jsp:scriptlet>
parms = request.getParameterNames();

while(parms.hasMoreElements()) {
   String name = (String) parms.nextElement();
   session.removeAttribute(name);
}

</jsp:scriptlet>


<img src="images/add.png" onclick="document.location='index.jsp'">
<img src="images/remove.jpg" onclick="document.location='remove.jsp'">
<img src="images/cart.jpg" onclick="document.location='cart.jsp'">

<h2>Remove items from cart</h2>

<form method="get" action="remove.jsp">

<table>

<% if (session.getAttribute("scissors") != null) { %>

<tr>
```

```
<td><input type="checkbox" name="scissors"></td><td>Scissors</td></td>
</tr>

<% } %>
<% if (session.getAttribute("book") != null) { %>

<tr>
<td><input type="checkbox" name="book"></td><td>Book</td></td>
</tr>

<% } %>

<% if (session.getAttribute("pen") != null) { %>

<tr>
<td><input type="checkbox" name="pen"></td><td>Pen</td></td>
</tr>

<% } %>

<% if (session.getAttribute("bottle") != null) { %>

<tr>
<td><input type="checkbox" name="bottle"></td><td>Bottle</td></td>
</tr>

<% } %>
<% if (session.getAttribute("glass") != null) { %>

<tr>
<td><input type="checkbox" name="glass"></td><td>Glass</td></td>
</tr>

<% } %>

</table>
<br><br>
<input type="submit" value="submit">
</form>

</body>
```

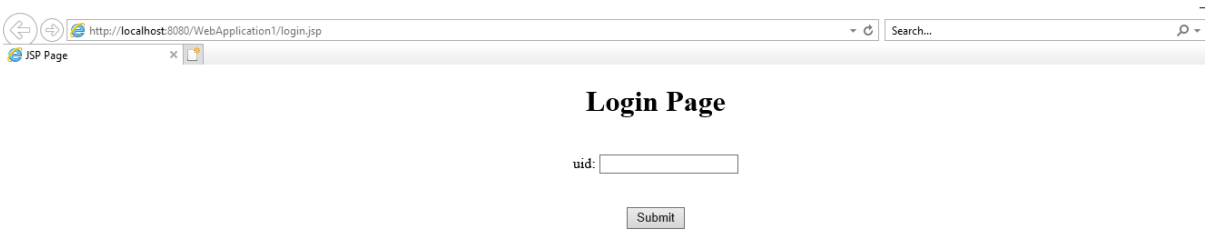
```
</html>
```

users.xml

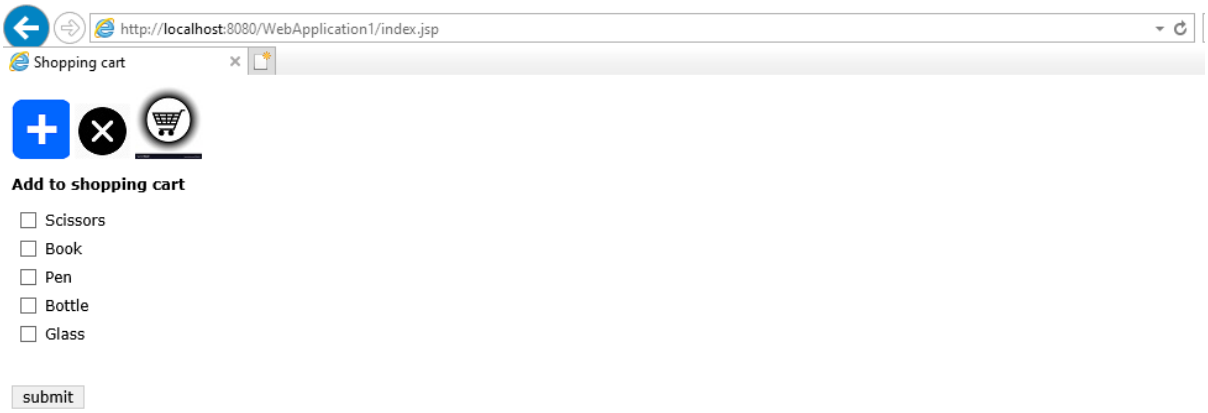
```
<?xml version="1.0" encoding="UTF-8"?>

<users>
   <uid>sheik12</uid>
   <uid>sheik22</uid>
</users>
```

Output:

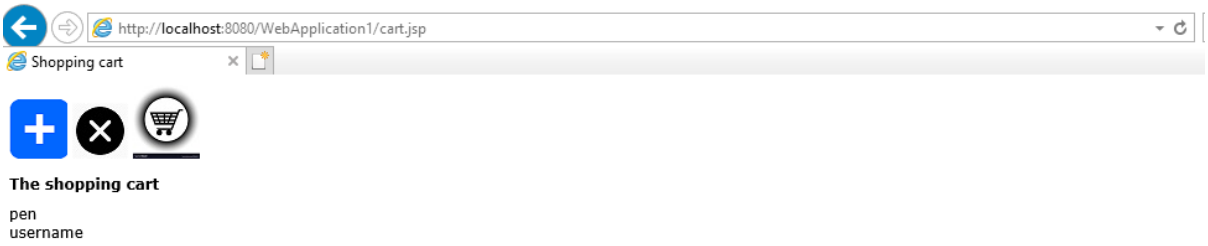
Login.jsp



Logincheck.jsp



Shopping Cart



Result:

Thus the Shopping cart application using TOMCAT web server install, configured and executed successfully,

EXPT NO:7	**Online Book Storage**
DATE:	

Aim:

To convert the static web pages into dynamic web pages. Create a database with user information and books information. The books catalogue should be dynamically loaded from the database.

Algorithm

- Start the Online Book Storage application in servlets.
- Create the form index.html to enter student marks with Login button.
- Use the Form post method.
- Click login button to invoke login servlet to fetch and check the details from database.
- Create the form and conducting online book store and submit the book details by using Submit button.
- Use the Form post method.
- Click submit button to invoke servlet to fetch and check the details from the database.

- Use jdbc:ucanaccess: to connect with the database.
- Stop the program.

main.html:

```
<html>
<body bgcolor=”pink”>
<br><br><br><br><br><br>
<h1 align=”center”>>U>ONLINE BOOK STORAGE</u></h1><br><br><br>
<h2 align=”center”><PRE>
<b> Welcome to online book
        storage.
Press LOGIN if you are having
        idOtherwise press
        REGISTRATION
</b></PRE></h2>
<br><br><pre>
<div align=”center”><a
href=”/tr/login.html”>LOGIN</a>
href=”/tr/login.html”>REGISTRATION</a></div></pr
e>
</body></html>
```

Login.html:

```
<html>
    <body bgcolor=”pink”><br><br><br>
```

```
<form name="myform" method="post" action=/tr1/login.jsp">
<div align="center"><pre>
LOGIN ID : <input type="passwors" name="pwd"></pre><br><br>
PASSWORD : <input type="password"
name="pwd"></pre><br><br>
</div>
<br><br>
<div align="center">
  <inputtype="submit"value="ok" onClick="validate()">     <input
type="reset"
value="clear">
 </form>
 </body>
 </html>
```

Reg.html:

```
<html>
    <body bgcolor="pink"><br><br>
    <form name="myform" method="post" action="/tr1/reg.jsp"><div align="center"><pre>
      NAME        :<input type="text"
      name="name"><br> ADDRESS :<input
      type="text" name="addr"><br>
      CONTACT NUMBER : <input type="text"
      name="phno"><br> LOGIN ID         : <input type="text"
      name="id"><br>
      PASSWORD : <input type="password" name="pwd"></pre><br><br>
      </div>
      <br><br>
      <div align="center">
        <inputtype="submit"value="ok"
onClick="validate()">()">     <input
type="reset" value="clear">
    </form>
    </body>
    </html>
```

Profile.html:

```
<html>
    <body bgcolor="pink"><br><br>
    <form name="myform" method="post" action="/tr1/profile.jsp">
      <div align="center"><pre>
      LOGIN ID      : <input type="text" name="id"><br>
      </pre><br><br>
      </div>
      <br><br>
      <div align="center">
        <inputtype="submit"value="ok"
onClick="validate()">()">     <input
```

```
type="reset" value="clear">
        </form>
        </body>
        </html>
```

Catalog.html:

```
        <html>
        <body bgcolor="pink"><br><br><br>
        <form method="post" action="/tr1/catalog.jsp"><div align="center"><pre>
         BOOK TITLE : <input type="text" name="title"><br>
         </pre><br><br>
         </div>
         <br><br>
         <div align="center">
          <inputtype="submit"value="ok"
name=”button1”>     <inputtype="reset"value="clear"
                                                                                    nam
e=”butt on2”>
        </form>
        </body>
        </html>Order.html:
 <html>
        <body bgcolor="pink"><br><br><br>
        <form method="post" action="/tr1/order.jsp">
         <div align="center"><pre>
         LOGIN ID          :<input type="text" name="id"><br>
         PASSWORD      : <input type="password"
         name="pwd"><br> TITLE     :<input type="text"
         name="title"><br>
         NO. OF BOOKS : <input type="text"
         name="no"><br> DATE        : <input type="text"
         name="date"><br>
         CREDIT CARD NUMBER : <input type="password" name="cno"><br></pre><br><br>
         </div>
         <br><br>
         <div align="center">
          <input type="submit" value="ok" name=”button1”>     <input
type="reset"
value="clear" name=”button2”>
        </form>
        </body>
        </html>
```

Login.jsp:

```
        %@page import=”java.sql.*”%
        %@page import=”java.io.*”%
```

```
<%
    out.println("<html><body
    bgcolor=\"pink\">"); String
    id=request.getParameter("id");
    String pwd=request.getParameter("pwd");
    Driver d=new
    oracle.jdbc.driver.OracleDriver();
String database="D:/db.accdb";
Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");
conn=DriverManager.getConnection("jdbc:ucanaccess://"+database);
 stmt=conn.createStatement();

    String sqlstmt="select id,password from login where id="+id+" and password="+pwd+"";
    ResultSet rs=stmt.executeQuery(sqlstmt);
    int
    flag=0;
    while(rs.
    next())
     {
       flag=1;

     if(flag==0)
     {
        out.println("SORRY INVALID ID TRY AGAIN ID<br><br>");
        out.println(" <a href=\"/tr1/login.html\">press LOGIN to RETRY</a>");
     }
     else
{
 out.println("VALID LOGIN
          ID<br><br>");
          out.println("<h3><ul>");
          out.println("<li><ahref=\"profile.html\"><fontcolor=\"black\">USE
R PROFILE</font></a></li><br><br>");
          out.println("<li><ahref=\"catalog.html\"><fontcolor=\"black\">BOOK
S CATALOG</font></a></li><br><br>");
          out.println("<li><ahref=\"order.html\"><fontcolor=\"black\">ORDE
R CONFIRMATION</font></a></li><br><br>");
          out.println("</ul>");
       }
       out.println("<body></html>");
   %>
```

Reg.jsp:

```
%@page import=”java.sql.*”%
%@page import=”java.io.*”%
<%
out.println(“<html><body bgcolor=\”pink\”>”);
String name=request.getParameter(“name”);
String addr=request.getParameter(“addr”); String
phno=request.getParameter(“phno”); String
id=request.getParameter(“id”);
String pwd=request.getParameter(“pwd”); int
no=Integer.parseInt(phno);
String database="D:/db.accdb";
Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");
conn=DriverManager.getConnection("jdbc:ucanaccess://"+database);
stmt=conn.createStatement();

String sqlstmt=”select id from login”;
ResultSet rs=stmt.executeQuery(sqlstmt); int
flag=0;
while(rs.next(
{
if(id.equals(rs.getString(1)))
{
flag=1;
}
}
if(flag==1)
{
out.println(“SORRY LOGIN ID ALREADY EXISTS TRY AGAIN WITH NEW ID
<br><br>”);
out.println(“<a href=\”/tr1/reg.html\”>press REGISTER to RETRY</a>”);
}
else
{
Statement stmt1=con.createStatement ();
stmt1.executeUpdate (“insert into login values (“+name+”,”+addr+”,”+no+”,”+id+”,”+pwd+”)”); out.println
(“YOU DETAILS ARE ENTERED <br><br>”);
out.println (“<a href =\”/tr1/login.html\”>press LOGIN to login</a>”);
}
out.println (“</body></html>”);%>
```

Profile.jsp:

```
<%@page import=”java.sql.*”%>
<%@page import=”java.io.*”%>
```

```
<%
    out.println (“<html><body bgcolor=\”pink\”>”); String
     id=request.getParameter(“id”);
     Driver d=new oracle.jdbc.driver.OracleDriver();
     DriverManager.regiserDriver(d);
Connection con=

    String database="D:/db.accdb";
    Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");
    conn=DriverManager.getConnection("jdbc:ucanaccess://"+database);
     stmt=conn.createStatement();
      String sqlstmt=”select * from login where id=”+id+””;
      ResultSet rs=stmt.executeQuery (sqlstmt);
      int flag=0;
      while(rs.next())
    {
        out.println (“<div align=\”center\”>”);
        out.println (“NAME          :”+rs.getString(1)+”<br>”);
        out.println (“ADDRESS :”+rs.getString(2)+”<br>”);
        out.println (“PHONE NO :”+rs.getString(3)+”<br>”);
        out.println (“</div>”);
        flag=1;
}
if(flag==0)
   {
        out.println(“SORRY INVALID ID TRY AGAIN ID <br><br>”);
        out.println(“<a href=\”/tr1/profile.html\”>press HERE to RETRY </a>”);
}
out.println (“</body></html>”);
%>
```

Catalog.jsp:

```
<%@page import="java.sql.*"%>
<%@page import="java.io.*"%>
<%
    out.println ("<html><body bgcolor=\"pink\">");
     String title=request.getParameter ("title"); Driver
     d=new oracle.jdbc.driver.OracleDriver ();
     DriverManager.regiserDriver (d);
     Connection con=
String database="D:/db.accdb";
Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");
conn=DriverManager.getConnection("jdbc:ucanaccess://"+database);
 stmt=conn.createStatement();
  String sqlstmt="select * from book where title="+title+"";
  ResultSet rs=stmt.executeQuery (sqlstmt);
  int flag=0;
  while(rs.next())
{



    out.println ("<div align=\"center\">");
    ut.println ("TITLE          :"+rs.getString(1)+"<br>");
    out.println ("AUTHOR :"+rs.getString(2)+"<br>");
    out.println ("VERSION:"+rs.getString(3)+"<br>");
    ut.println ("PUBLISHER :" +rs.getString(4)+"<br>");
    out.println ("COST :" +rs.getString(5)+"<br>"); out.println
    ("</div>");
    flag=1;
}
if(flag==0)
  {
    out.println("SORRY INVALID ID TRY AGAIN ID <br><br>");
    out.println("<a href=\"/tr1/catalog.html\">press HERE to RETRY </a>");
}
out.println ("</body></html>");
%>
```

Order.jsp:

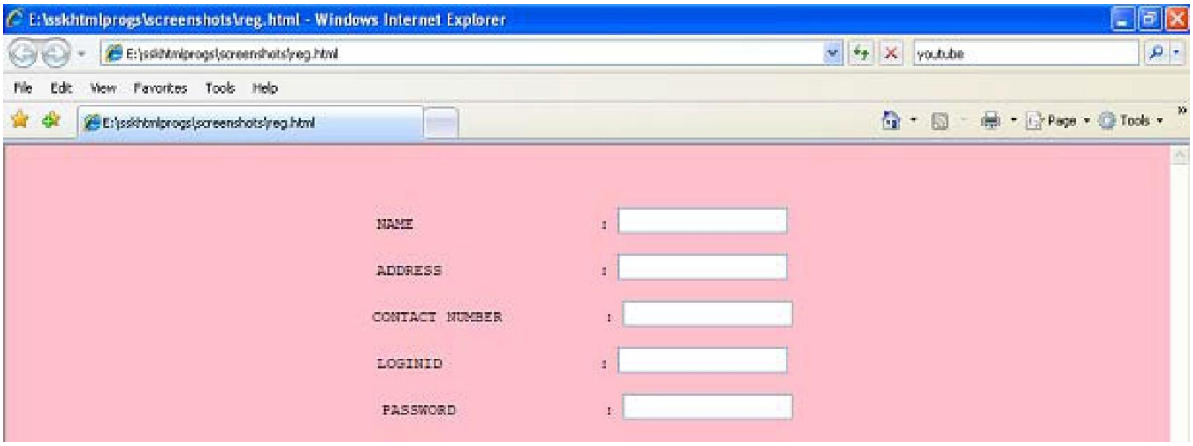
```
<%@page import="java.sql.*"%>
 <%@page import="java.io.*"%>
 <%
     out.println ("<html><body bgcolor=\"pink\">"); String
     id=request.getParameter ("id");
     String pwd=request.getParameter ("pwd");
     String title=request.getParameter ("title");
     String count1=request.getParameter ("no");
     String date=request.getParameter ("date");
     String cno=request.getParameter ("cno"); int
     count=Integer.parseInt(count1);
String database="D:/db.accdb";
Class.forName("net.ucanaccess.jdbc.UcanaccessDriver");
conn=DriverManager.getConnection("jdbc:ucanaccess://"+database);
 stmt=conn.createStatement();
  String sqlstmt="select id, password from login";
  ResultSet rs=stmt.executeQuery (sqlstmt);

  int flag=0,amount,x;


  while(rs.next()){
     if(id.equals(rs.getString(1))&& pwd.equals(rs.getString(2)))
        {
           flag=1;
   }
}
if(flag==0)
{



 out.println("SORRY INVALID ID TRY AGAIN ID <br><br>");
 out.println("<a href=\"/tr1/order.html\">press HERE to RETRY </a>");



Statement stmt2=con.createStatemet;String s="select cost from book where title="+title+""; ResultSet
rs1=stmt2.executeQuery(;int flag1=0; while(rs1.next())

}
```

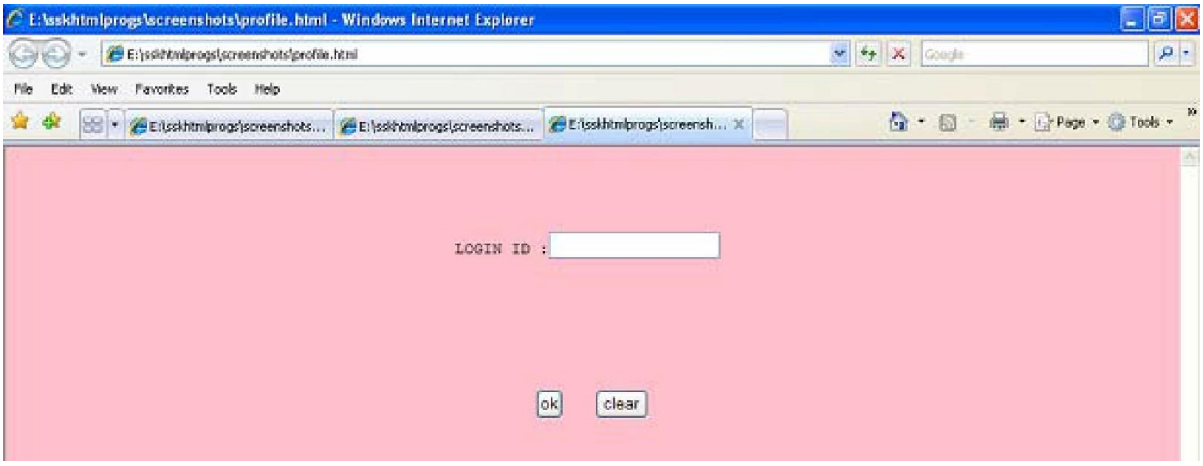
```
else
{flag1=1; x=Integer.parseInt(rs1.getString(1)); amount=count*x;
        out.println("AMOUNT :"+amount+"<br><br><br><br>"); Statement
        stmt1=con.createStatement ();
        stmt1.executeUpdate ("insert into details ("+id+","+title+","+amount+","+date+","+cno+")"); out.println
        ("YOU ORDER HAS TAKEN<br>");
}
if(flag1==0)
{
          out.println("SORRY INVALID BOOK TRY AGAIN <br><br>");
          out.println("<a href=\"/tr1/order.html\">press HERE to RETRY </a>");
    }
}                       out.println ("</body></html>");%>
```

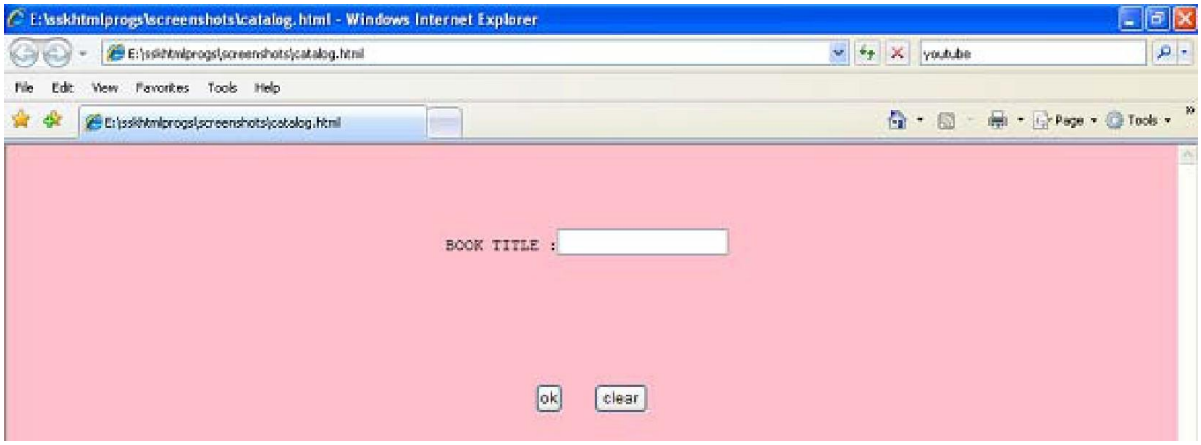
Output


E:\sskhtmlprogs\screenshots\main.html - Windows Internet Explorer
E:\sskhtmlprogs\screenshots\main.html
File Edit View Favorites Tools Help
E:\sskhtmlprogs\screenshots\main.html
Page Tools
ONLINE BOOK STORAGE
Welcome to online book storage.
Press LOGIN if you are having id
otherwise press REGISTRATION
LOGIN
REGISTRATION


E:\sskhtmlprogs\screenshots\login.html - Windows Internet Explorer
File Edit View Favorites Tools Help
LOGIN ID :
PASSWORD :
ok
clear


E:\sskhtmlprogs\screenshots\reg.html - Windows Internet Explorer
File Edit View Favorites Tools Help
NAME :
ADDRESS :
CONTACT NUMBER :
LOGINID :
PASSWORD :


E:\sskhtmlprogs\screenshots\profile.html - Windows Internet Explorer
File Edit View Favorites Tools Help
LOGIN ID :
ok
clear



Result:

Thus the online book store application was developed successfully using JSP and MSACCESS.

EXPT NO:8	CREATION AND IMPLEMENTATION OF XML DOCUMENT ON CLIENT-SERVER BASIS
DATE:	

AIM

- Create and save an XML document at the server, which contains 10 users Information.
- Write a Program, which takes user Id as an input and returns the User details by taking the user information from the XML document.

Procedure:

- Create XML document for User details(ID,PASSWORD,NAME,AGE,CITY)
- Save user information.
- Design Html Form to get user id and password as input.
- Write a Javascript program to validate that id and password and access the user information from XML document.
- Display the user details in a webpage.

PROGRAM

User.xml

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

 <users>
 <user>
 <userid>abc</userid>
 <password>abc</password>
 <first_name>raj</first_name>
 <last_name>kumar</last_name>
 <dob>10/1/1982</dob>
 </user>
 <user>
 <userid>ravi</userid>
 <password>ravi</password>
 <first_name>ravi</first_name>
 <last_name>kumar</last_name>
 <dob>11/11/1982</dob>
 </user>
<user>
<userid>sri</userid>
 <password>sri</password>
 <first_name>sri</first_name>
 <last_name>ram</last_name>
 <dob>12/12/1983</dob>
```

```
 </user>
<user>
 <userid>lax</userid>
 <password>lax</password>
 <first_name>laxman</first_name>
 <last_name>kumar</last_name>
 <dob>1/1/1980</dob>
 </user>
<user>
 <userid>chandu</userid>
 <password>chandu</password>
 <first_name>chandana</first_name>
 <last_name>priya</last_name>
 <dob>9/11/1998</dob>
 </user>
<user>
 <userid>vysu</userid>
 <password>vysu</password>
 <first_name>vyshnavi</first_name>
 <last_name>matha</last_name>
 <dob>17/6/1982</dob>
 </user>
<user>
 <userid>prem</userid>
 <password>prem</password>
 <first_name>prem</first_name>
 <last_name>kumar</last_name>
 <dob>11/11/1988</dob>
 </user>
<user>
 <userid>geeta</userid>
 <password>geeta</password>
 <first_name>geeta</first_name>
 <last_name>anjali</last_name>
 <dob>13/1/1972</dob>
 </user>
<user>
 <userid>preeti</userid>
 <password>preeti</password>
 <first_name>prethi</first_name>
 <last_name>priya</last_name>
<dob>7/11/1968</dob>
 </user>
<user>
 <userid>praveen</userid>
 <password>praveen</password>
```

```
 <first_name>kumar</first_name>
 <last_name>kumar</last_name>
 <dob>11/11/1999</dob>
 </user>
</users>
```

Validate.htm

```
<html>
<body>
<script language="JavaScript">
function f1(user,passwd)
{

var xml = new ActiveXObject("Microsoft.XMLDOM");
xml.load("user.xml");

var idin=user;
var p=passwd;
var users = xml.getElementsByTagName("users");

search:

for(var i = 0; i < users.length; i++)
{
   var user = users[i];
   var ids = user.getElementsByTagName("userid");
   var pass = user.getElementsByTagName("password");
   var fname = user.getElementsByTagName("first_name");
   var lname = user.getElementsByTagName("last_name");
   var dob = user.getElementsByTagName("dob");
   var match=0;
   for(var j = 0; j < ids.length; j++)
   {
      if(idin==(ids[j].childNodes[0].nodeValue))
         { match=1;
           if(p==(pass[j].childNodes[0].nodeValue))
                {
                document.write("<html><body><center><b>USER
IFORMATION<b><br><br><br>");

        document.write("<b><table><tr><td>ID</td><td>:</td><td>"+ids[j].childNod
es[0].nodeValue+"</td></tr>");

        document.write("<tr><td>NAME</td><td>:</td><td>"+fname[j].childNodes[
0].nodeValue+"</td></tr>");
```

```
        document.write("<tr><td>AGE</td><td>:</td><td>"+lname[j].childNodes[0].
nodeValue+"</td></tr>");

        document.write("<tr><td>CITY</td><td>:</td><td>"+dob[j].childNodes[0].n
odeValue+"</td></tr></table>");
                document.write("</b></center></body></html>");
                break search;
                }
             else
                document.write("<html><body><center>INVALID
PASSWORD<br><br><br>");
           }


   }
        if(match==0)
        document.write("<html><body><center>CHECK YOUR USERNAME &
PASSWORD<br><br><bSr>");

}
}
</script><center style="color:Red;font-size:30px">
<form name=""f1">USER DETAILS<br><br><br>
<table>
<tr><td>       User ID</td><td>:</td><td><input type=""text" name="t1"></td></tr>
  <tr><td>     Password</td><td>:</td><td><input type=password
name="t2"></td></tr></table><br>
 <input type="button" value="SUBMIT"  onClick="f1(t1.value,t2.value)">
</form></center></body></html>
```

OUTPUT

USER DETAILS

User ID : abc

Password :

Submit

USER IFORMATION

ID : abc
NAME : raj
AGE : kumar
CITY : 10/1/1982

RESULT

Thus program to retrieve data from XML document has been written & executed successfully.

EXPT NO:9	User Registration and Login Authentication using PHP and MySQL
DATE:	

AIM

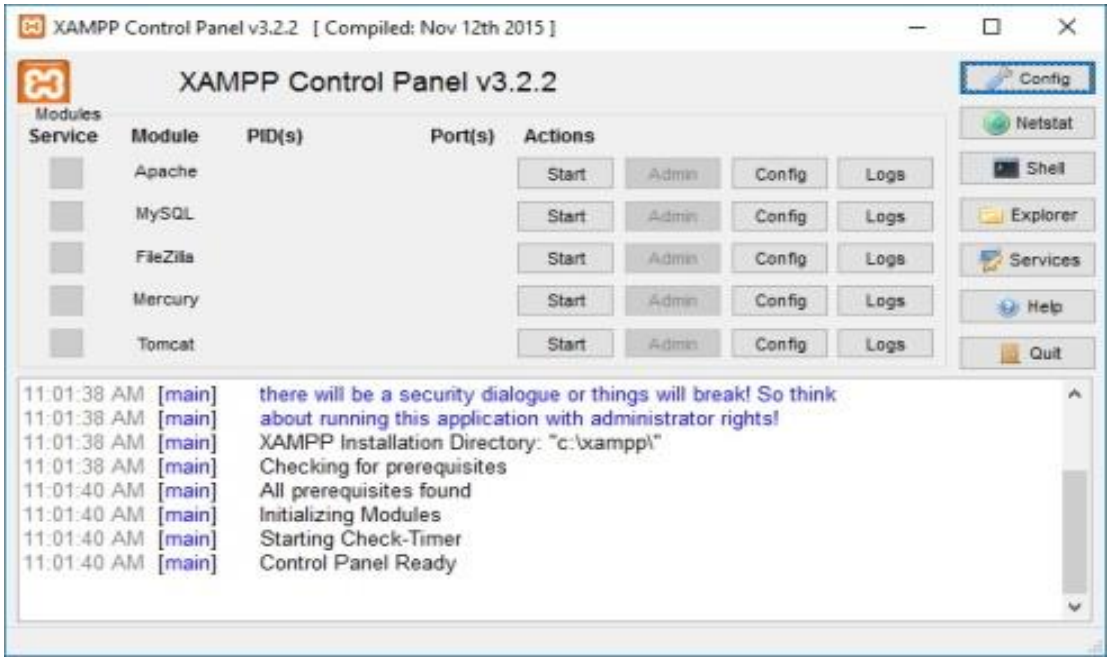
- Validate the Registration form using PHP regular expression.
- PHP stores a form data into MySQL database

Procedure:

XAMPP is a free open source software that provides an easy way for web designers and developers to install the necessary components to run PHP based software

How to install XAMPP

- Open the Apache Friends website
- Click the XAMPP for Windows button to save the file on your desktop.
- Double-click the downloaded file to launch the installer.
- Click the Next button.
- XAMPP offers a variety of components that you can install, such as MySQL, phpMyAdmin, PHP, Apache, and more. For the most part, you will be using most of these components, as such it's recommended to leave the default options.
- Use the default installed location, or choose another folder to install the software in the "Select a folder" field.
- Click the Next button.
- Click the Allow access button to allow the app through the firewall (if applicable).
- Click the Finish button.



Complete process of creating a user registration system where users can create an account by providing username, email and password, login and logout using PHP and MySQL.

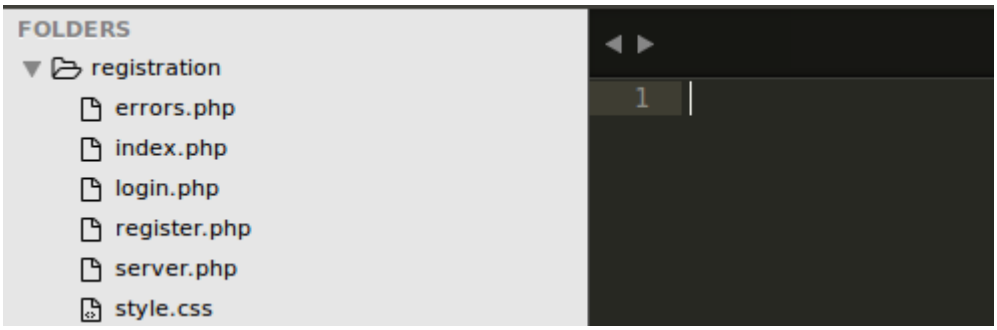
- Create a database called **registration**. In the **registration** database, add a table called **users**. The users table will take the following four fields.

  - id
  - username - varchar(100)
  - email - varchar(100)
  - password - varchar(100)

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id	int(11)			No	None		AUTO_INCREMENT	Change Drop Primary Unique More
2	username	varchar(100)	latin1_swedish_ci		No	None			Change Drop Primary Unique More
3	email	varchar(100)	latin1_swedish_ci		No	None			Change Drop Primary Unique More
4	password	varchar(100)	latin1_swedish_ci		No	None			Change Drop Primary Unique More

- Now create a folder called **registration** in a directory accessible to our server. i.e create the folder inside htdocs (if you are using XAMPP server)

- Inside the folder **registration**



- Write a following code and save register.php, index.php, login.php, server.php, style.css, errors.php file in **registration** directory accessible to our server. i.e create the folder inside htdocs (if you are using XAMPP server)
-

Database Creation:

- Create **registration** Database on XAMPP phpMyAdmin

- Create Users Tables Using phpMyAdmin XAMPP

Coding:

register.php

```
<?php include('server.php') ?>
<!DOCTYPE html>
<html>
<head>
  <title>Registration system PHP and MySQL</title>
  <link rel="stylesheet" type="text/css" href="style.css">
</head>
<body>
  <div class="header">
        <h2>Register</h2>
  </div>

  <form method="post" action="register.php">
        <?php include('errors.php'); ?>
        <div class="input-group">
          <label>Username</label>
```

```
        <input type="text" name="username" value="<?php echo $username; ?>">
      </div>
      <div class="input-group">
        <label>Email</label>
        <input type="email" name="email" value="<?php echo $email; ?>">
      </div>
      <div class="input-group">
        <label>Password</label>
        <input type="password" name="password_1">
      </div>
      <div class="input-group">
        <label>Confirm password</label>
        <input type="password" name="password_2">
      </div>
      <div class="input-group">
        <button type="submit" class="btn" name="reg_user">Register</button>
      </div>
      <p>
            Already a member? <a href="login.php">Sign in</a>
      </p>
  </form>
</body>
</html>
```

login.php

```
<?php include('server.php') ?>
<!DOCTYPE html>
<html>
<head>
  <title>Registration system PHP and MySQL</title>
  <link rel="stylesheet" type="text/css" href="style.css">
</head>
<body>
  <div class="header">
      <h2>Login</h2>
  </div>

  <form method="post" action="login.php">
      <?php include('errors.php'); ?>
      <div class="input-group">
```

```
            <label>Username</label>
            <input type="text" name="username" >
        </div>
        <div class="input-group">
            <label>Password</label>
            <input type="password" name="password">
        </div>
        <div class="input-group">
            <button type="submit" class="btn" name="login_user">Login</button>
        </div>
        <p>
            Not yet a member? <a href="register.php">Sign up</a>
        </p>
  </form>
</body>
</html>
```

server.php

```
<?php

session_start();

// initializing variables
$username = "";
$email    = "";
$errors = array();

// connect to the database
$db = mysqli_connect('localhost', 'root', '', 'registration');

// REGISTER USER
if (isset($_POST['reg_user'])) {
  // receive all input values from the form
  $username = mysqli_real_escape_string($db, $_POST['username']);
  $email = mysqli_real_escape_string($db, $_POST['email']);
  $password_1 = mysqli_real_escape_string($db, $_POST['password_1']);
  $password_2 = mysqli_real_escape_string($db, $_POST['password_2']);

  // form validation: ensure that the form is correctly filled ...
```

```
  // by adding (array_push()) corresponding error unto $errors array
  if (empty($username)) { array_push($errors, "Username is required"); }
  if (empty($email)) { array_push($errors, "Email is required"); }
  if (empty($password_1)) { array_push($errors, "Password is required"); }
  if ($password_1 != $password_2) {
        array_push($errors, "The two passwords do not match");
  }

  // first check the database to make sure
  // a user does not already exist with the same username and/or email
  $user_check_query = "SELECT * FROM users WHERE username='$username' OR
email='$email' LIMIT 1";
  $result = mysqli_query($db, $user_check_query);
  $user = mysqli_fetch_assoc($result);

  if ($user) { // if user exists
    if ($user['username'] === $username) {
      array_push($errors, "Username already exists");
    }

    if ($user['email'] === $email) {
      array_push($errors, "email already exists");
    }
  }

  // Finally, register user if there are no errors in the form
  if (count($errors) == 0) {
        $password = md5($password_1);//encrypt the password before saving in the
database

        $query = "INSERT INTO users (username, email, password)
                        VALUES('$username', '$email', '$password')";
        mysqli_query($db, $query);
        $_SESSION['username'] = $username;
        $_SESSION['success'] = "You are now logged in";
        header('location: index.php');
  }
}

// LOGIN USER
```

```
if (isset($_POST['login_user'])) {
  $username = mysqli_real_escape_string($db, $_POST['username']);
  $password = mysqli_real_escape_string($db, $_POST['password']);

  if (empty($username)) {
        array_push($errors, "Username is required");
  }
  if (empty($password)) {
        array_push($errors, "Password is required");
  }

  if (count($errors) == 0) {
        $password = md5($password);
        $query = "SELECT * FROM users WHERE username='$username' AND password='$password'";
        $results = mysqli_query($db, $query);
        if (mysqli_num_rows($results) == 1) {
          $_SESSION['username'] = $username;
          $_SESSION['success'] = "You are now logged in";
          header('location: index.php');
        }else {
                array_push($errors, "Wrong username/password combination");
        }
  }
}

?>
```

index.php

```
<?php
  session_start();

  if (!isset($_SESSION['username'])) {
        $_SESSION['msg'] = "You must log in first";
        header('location: login.php');
  }
  if (isset($_GET['logout'])) {
        session_destroy();
        unset($_SESSION['username']);
        header("location: login.php");
```

```
  }
?>
<!DOCTYPE html>
<html>
<head>
        <title>Home</title>
        <link rel="stylesheet" type="text/css" href="style.css">
</head>
<body>

<div class="header">
        <h2>Home Page</h2>
</div>
<div class="content">
        <!-- notification message -->
        <?php if (isset($_SESSION['success'])) : ?>
    <div class="error success" >
        <h3>
       <?php
        echo $_SESSION['success'];
        unset($_SESSION['success']);
       ?>
        </h3>
    </div>
        <?php endif ?>

   <!-- logged in user information -->
   <?php  if (isset($_SESSION['username'])) : ?>
        <p>Welcome <strong><?php echo $_SESSION['username']; ?></strong></p>
        <p> <a href="index.php?logout='1'" style="color: red;">logout</a> </p>
   <?php endif ?>
</div>

</body>
</html>
```

errors.php

```
<?php  if (count($errors) > 0) : ?>
  <div class="error">
```

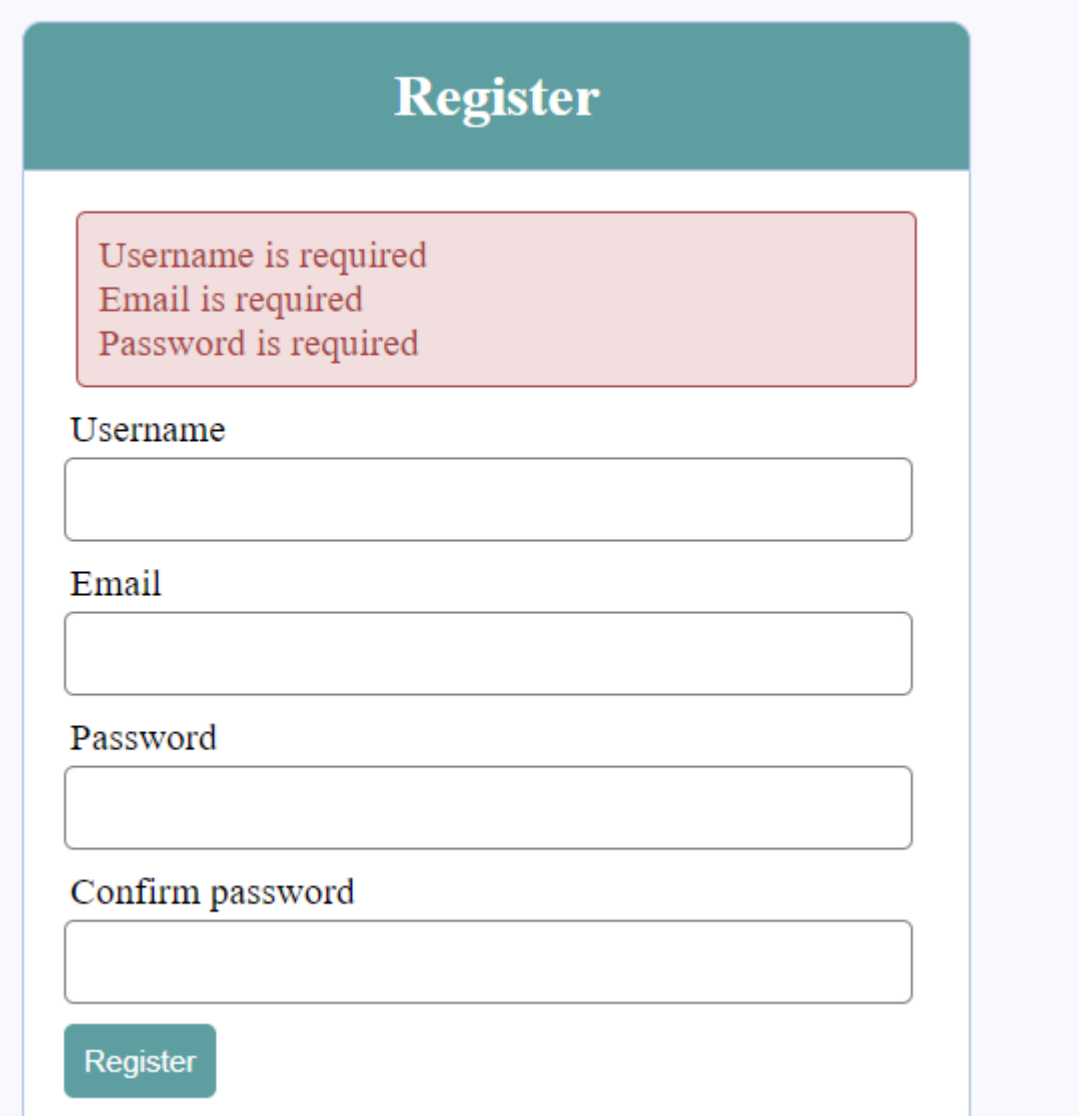
```
        <?php foreach ($errors as $error) : ?>
          <p><?php echo $error ?></p>
        <?php endforeach ?>
  </div>
<?php  endif ?>
```

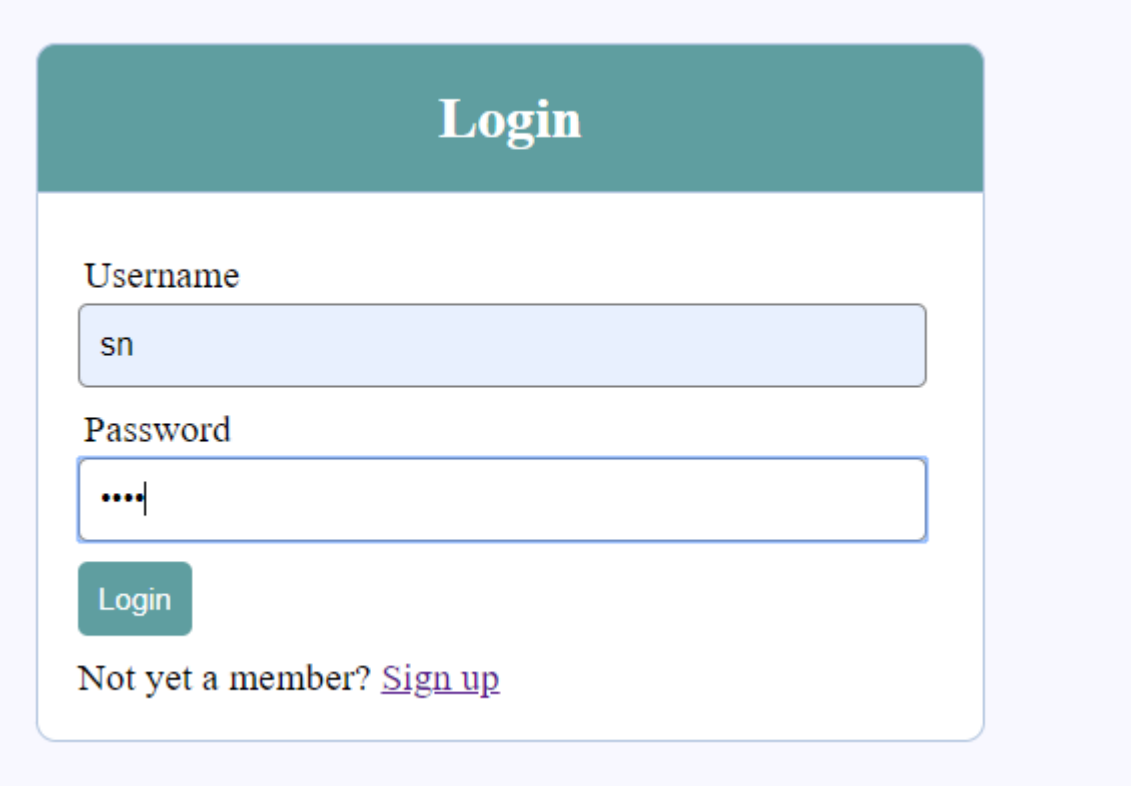
style.css

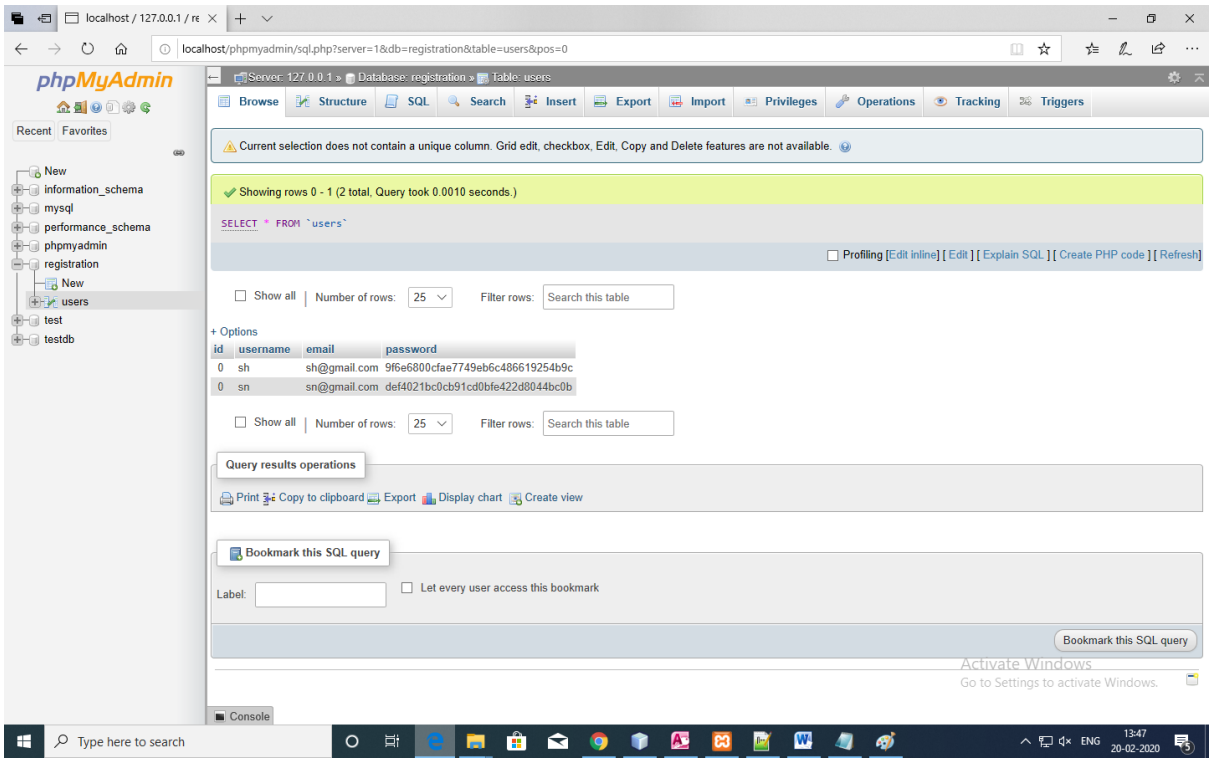
```
* {
  margin: 0px;
  padding: 0px;
}
body {
  font-size: 120%;
  background: #F8F8FF;
}

.header {
  width: 30%;
  margin: 50px auto 0px;
  color: white;
  background: #5F9EA0;
  text-align: center;
  border: 1px solid #B0C4DE;
  border-bottom: none;
  border-radius: 10px 10px 0px 0px;
  padding: 20px;
}
form, .content {
  width: 30%;
  margin: 0px auto;
  padding: 20px;
  border: 1px solid #B0C4DE;
  background: white;
  border-radius: 0px 0px 10px 10px;
}
.input-group {
  margin: 10px 0px 10px 0px;
}
.input-group label {
  display: block;
```

```
  text-align: left;
  margin: 3px;
}
.input-group input {
  height: 30px;
  width: 93%;
  padding: 5px 10px;
  font-size: 16px;
  border-radius: 5px;
  border: 1px solid gray;
}
.btn {
  padding: 10px;
  font-size: 15px;
  color: white;
  background: #5F9EA0;
  border: none;
  border-radius: 5px;
}
.error {
  width: 92%;
  margin: 0px auto;
  padding: 10px;
  border: 1px solid #a94442;
  color: #a94442;
  background: #f2dede;
  border-radius: 5px;
  text-align: left;
}
.success {
  color: #3c763d;
  background: #dff0d8;
  border: 1px solid #3c763d;
  margin-bottom: 20px;
}
```

Output:


Register
Username is required
Email is required
Password is required
Username
Email
Password
Confirm password
Register





Result:

Thus the php program to validate User Registration and Login Authentication has been executed successfully.

EXPT NO:10	Rating System in Web Service using jsp and mysql
DATE:	

AIM

- To develop a web service for finding what people think by asking 500 people‘s opinion for any consumer product

Procedure:

Step 1: Create project

Open Netbeans >> Select File >> New Project >> Java Web: Web Application:

WebService Project name

Step 2: Create WebService

Right click on the project ‘HelloWorldWebService’ >> New >> Web Service:

Enter Web service name: Webserv

Step 3: Add web method (INSERT)

Step 4: Clean and build the application

Step 6: Test the webservice

DB Connection

Step 7: Create Database in Mysql with the table name of opinion

Step 8 :add Username,prid,stars columns in opinion table

Database Creation:

- Create **registration** Database on XAMPP phpMyAdmin
- Create **Users** Tables Using phpMyAdmin XAMPP

Step 9: Create a JSP web file index.jsp

index.jsp

```
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
    <head>
        <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
        <title>JSP Page</title>
    </head>
    <body>
        <h1>Web service for finding what people think by asking 500 people‘s opinion for any consumer product.!</h1>
        <form>
            <label for = "uname">
                UserName :
            </label>
            <input type="text" name="uname">
            <label for = "pid">
                Product ID :
            </label>
            <input type="text" name="pid">
            <label for = "stars">
                Rating Stars(Out Of 5) :
            </label>
            <input type="text" name="stars">
            <input type="submit" name="submit">
        </form>

        <%-- start web service invocation --%><hr/>
        <%
            try {
```

```
            webserpkg.Webserv_Service service = new webserpkg.Webserv_Service();
            webserpkg.Webserv port = service.getWebservPort();
            // TODO initialize WS operation arguments here
            java.lang.String uname = "uname";
            int prid = Integer.parseInt("pid");
            int stars = Integer.parseInt("stars");
            // TODO process result here
            int result = port.insert(uname, prid, stars);
            out.println("Result = " + result);
        } catch (Exception ex) {
            // TODO handle custom exceptions here
        }
    %>
    <%-- end web service invocation --%><hr/>
  </body>
</html>
```

@WebService

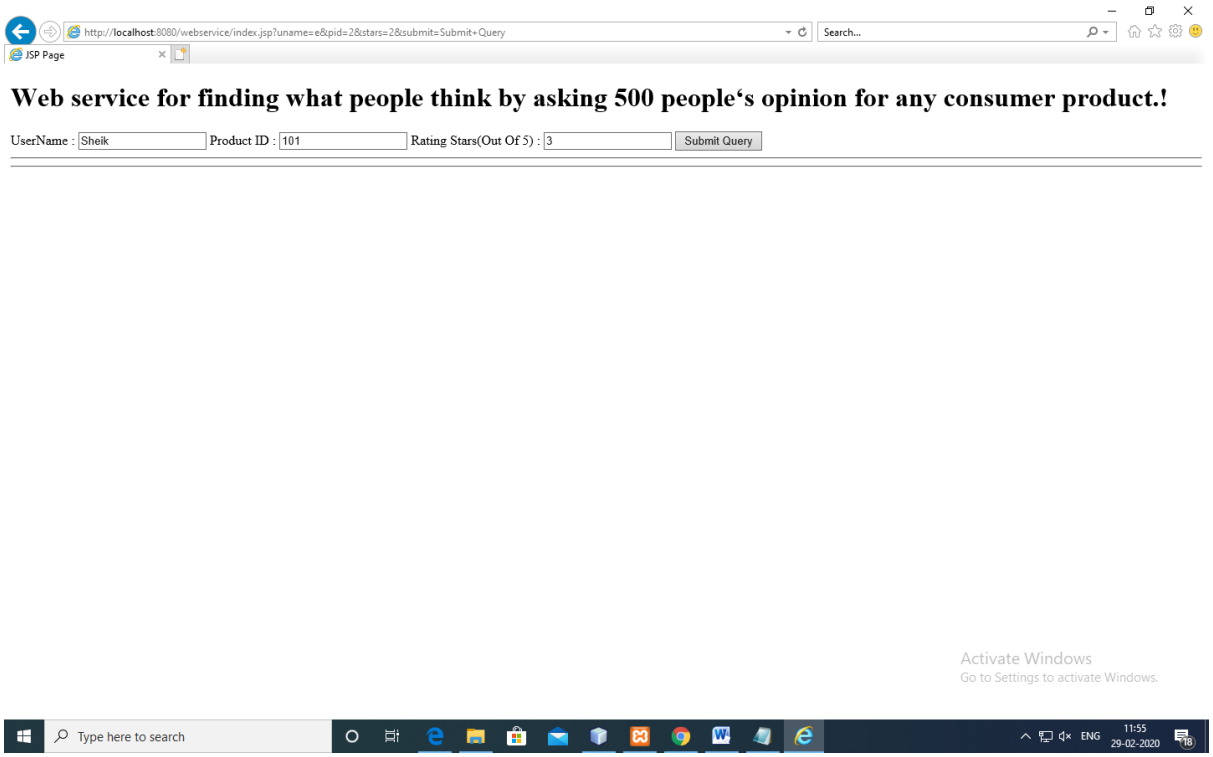
Webserv.java

```
package dbconn;

import java.sql.Connection;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.Statement;
import javax.jws.WebService;
import javax.jws.WebMethod;
import javax.jws.WebParam;
import java.sql.DriverManager;
import java.sql.SQLException;
import javax.ejb.Stateless;
```

```
import javax.swing.JOptionPane;

@WebService(serviceName = "webserv")
public class webserv {

    Connection con = null;
    Statement stmt = null;
    ResultSet rs = null;

    @WebMethod(operationName = "insert")
    public int insert(@WebParam(name = "uname") String uname, @WebParam(name
= "prid") int prid, @WebParam(name = "stars") int stars) {
        //TODO write your implementation code here:

        try {
Class.forName("com.mysql.jdbc.Driver");
            con = (Connection)
DriverManager.getConnection("jdbc:mysql://localhost:3306/rating?", "root", "");
            stmt = con.createStatement();
            stmt.executeUpdate("insert into opinion (uname,prid,stars) values('" + uname
+ "','" + prid + "','" + stars + "')");
            rs = stmt.executeQuery("SELECT SUM(stars) FROM opinion");
            while (rs.next()) {
                return rs.getInt(1);
            }

        } catch (ClassNotFoundException | SQLException e) {
            // JOptionPane.showMessageDialog(rootPane, e);

        }
```

```
        //String sq="SELECT SUM(stars) FROM rating";
        //PreparedStatement pst=con.prepareStatement(sq);
        // pst.execute();
        //   update();
        return 0;
    }
}
```

Output:



Result:

The development of web service for finding what people think by asking 500 people‘s opinion for any consumer product running successfully.