

9. Write a Java program with Servlets to create a dynamic HTML form to accept and display user name and password with the help of 'get()' and 'post()' methods.

#### index.html

```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Login Form</title>
</head>
<body>
    <form method="post" action="login">
        User Name:<input type="text" name="name" /><br/>
        Password:<input type="text" name="pass" /><br/>
        <input type="submit" value="login" />
    </form>
</body>
</html>
```

#### Login.java

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

public class Login extends HttpServlet {

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

        String uname = request.getParameter("name");
        String upass = request.getParameter("pass");
        if(uname.equals("Student") && upass.equals("ise-dsce")){
            RequestDispatcher rs = request.getRequestDispatcher("Welcome");
            rs.forward(request, response);
        }
        else
        {
            out.println("Username or Password incorrect");
            RequestDispatcher rs = request.getRequestDispatcher("index.html");
            rs.include(request, response);
        }
    }
}
```

**Welcome.java**

```
import java.io.*;

import javax.servlet.*;
import javax.servlet.http.*;

import java.sql.*;

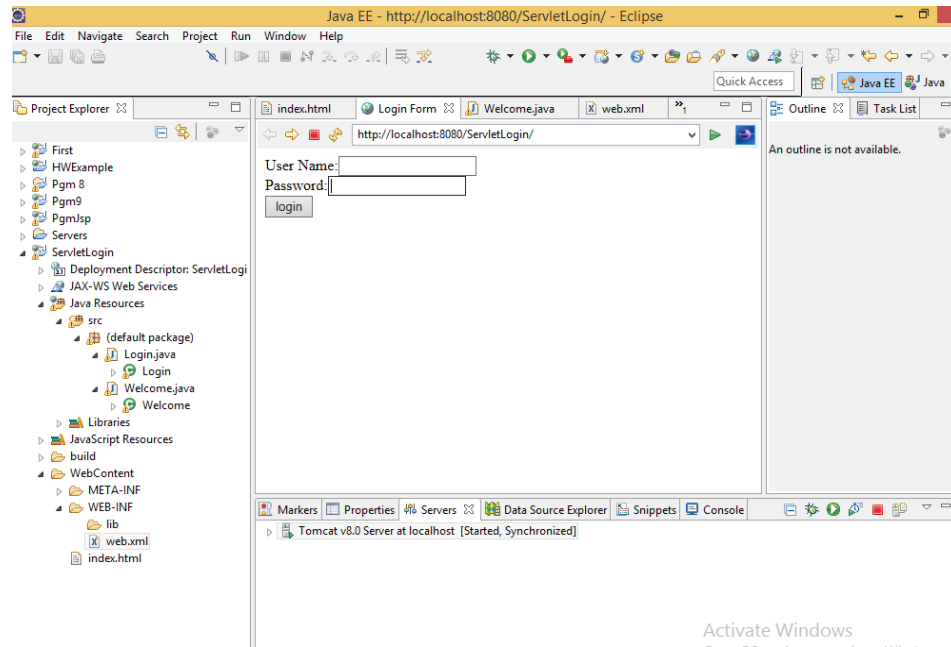
public class Welcome extends HttpServlet {

    protected void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        String uname = request.getParameter("name");
        PrintWriter out = response.getWriter();
        out.println("Welcome "+ uname);
    }
}
```

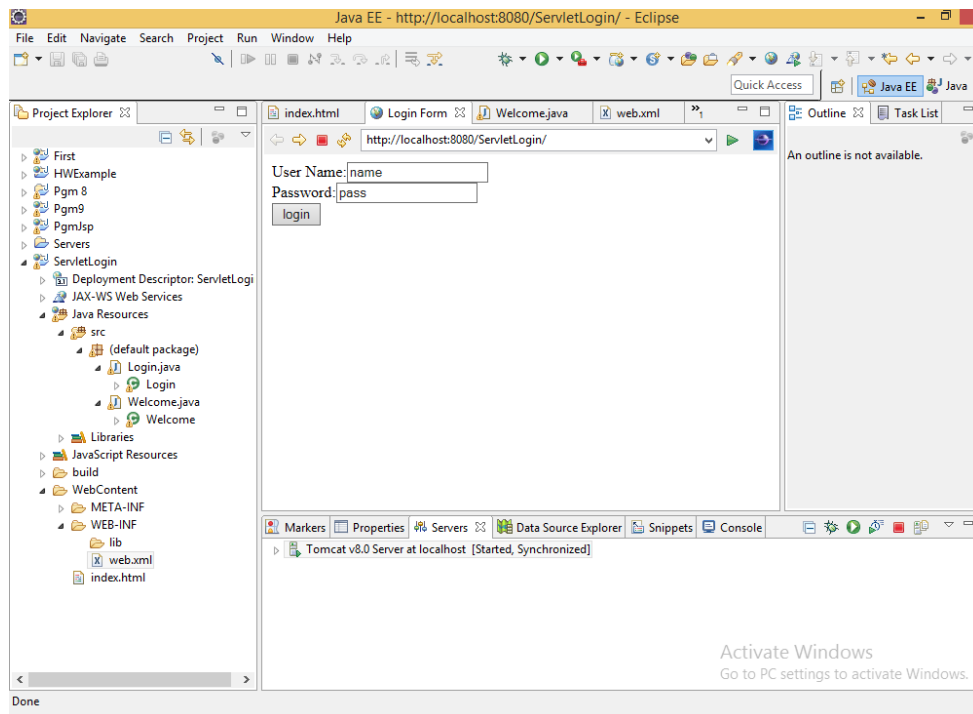
**web.xml**

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://xmlns.jcp.org/xml/ns/javaee"
xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/xml/ns/javaee/web-
app_3_1.xsd" id="WebApp_ID" version="3.1">
    <display-name>Servlet Login</display-name>
    <servlet>
        <servlet-name>login</servlet-name>
        <servlet-class>Login</servlet-class>
    </servlet>
    <servlet>
        <servlet-name>Welcome</servlet-name>
        <servlet-class>Welcome</servlet-class>
    </servlet>
    <servlet-mapping>
        <servlet-name>login</servlet-name>
        <url-pattern>/login</url-pattern>
    </servlet-mapping>
    <servlet-mapping>
        <servlet-name>Welcome</servlet-name>
        <url-pattern>/Welcome</url-pattern>
    </servlet-mapping>
</web-app>
```

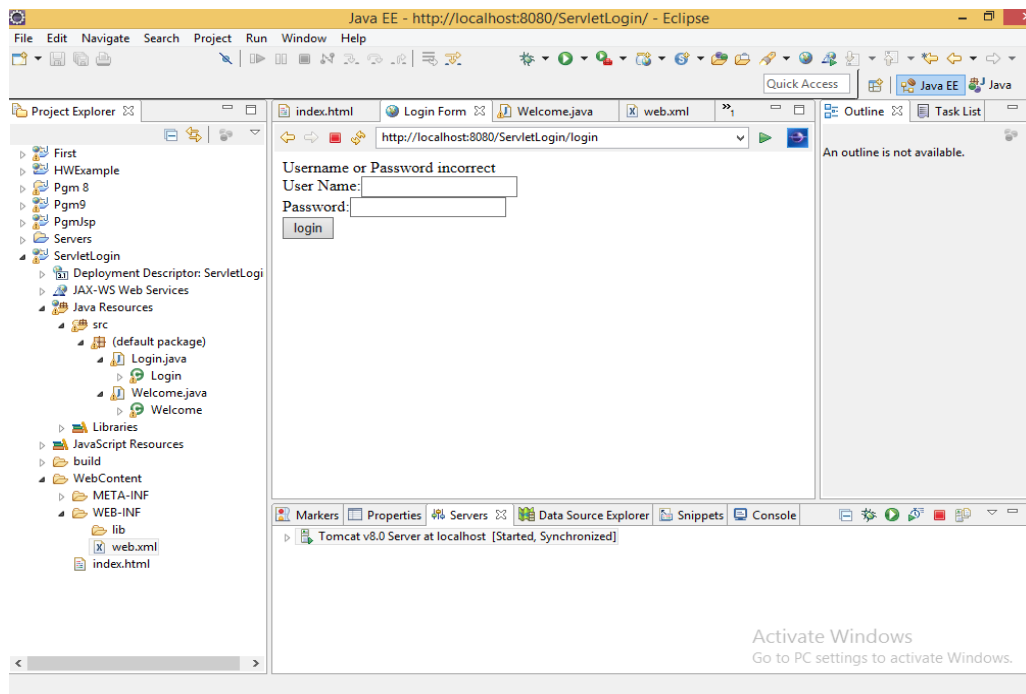
Output:



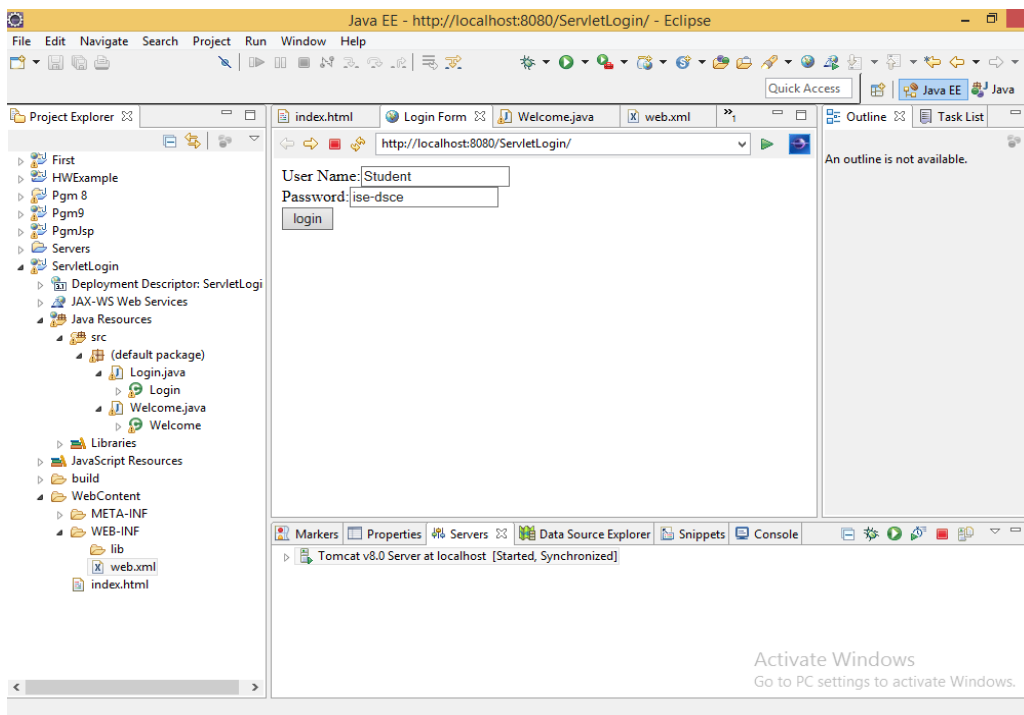
Login Page



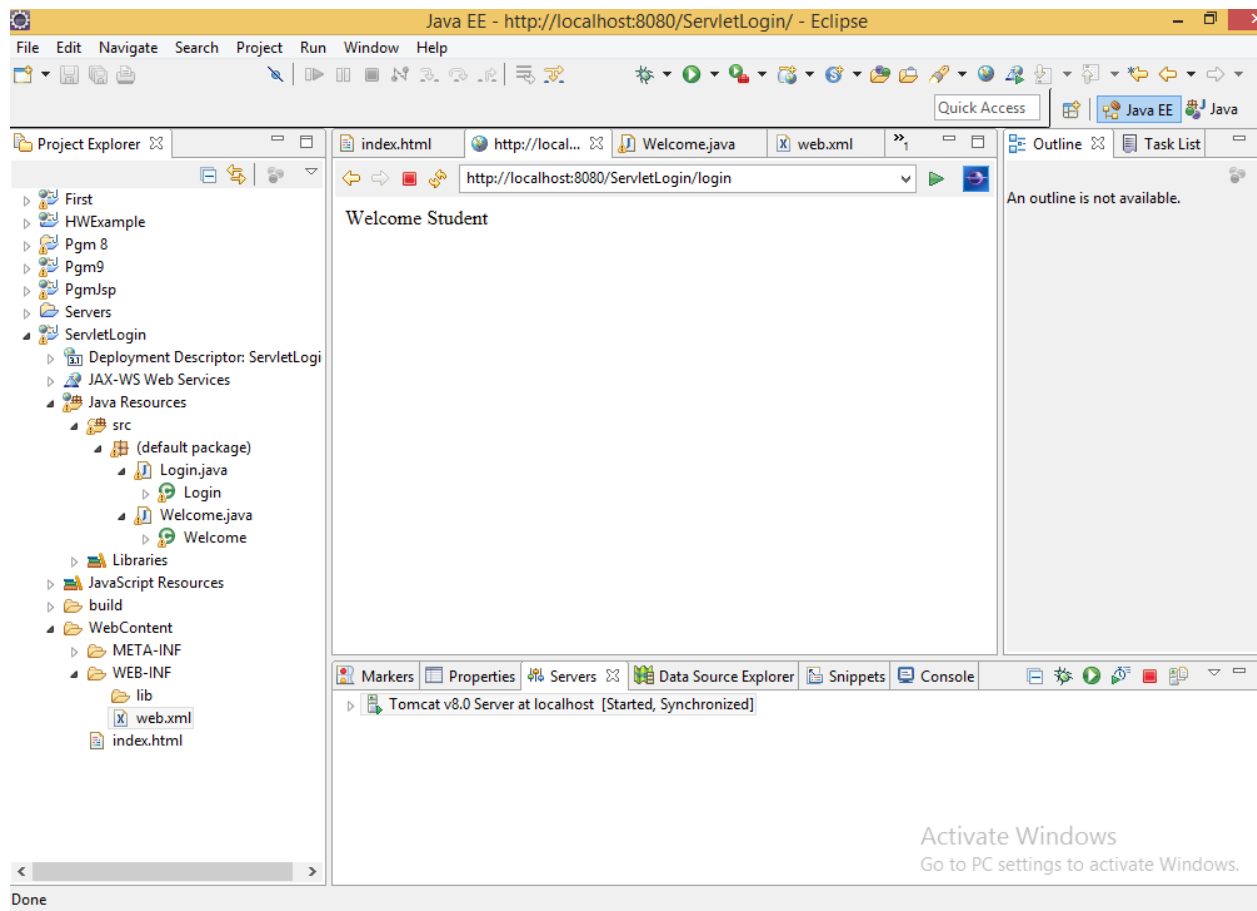
Incorrect Login Credentials



Incorrect Message for Incorrect Login Credentials



Correct Login Credentials



Welcome Message for Correct Login Credentials

10. Write a Java Servlet program to demonstrate session tracking.

**SessionTrack.java**

```
import java.io.IOException;
import java.io.PrintWriter;
import java.util.Date;

import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

public class SessionTrack extends HttpServlet {
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        // TODO Auto-generated method stub
        HttpSession session = request.getSession(true);
        Date createTime = new Date(session.getCreationTime());
        Date lastAccessTime = new Date(session.getLastAccessedTime());
        String title = "Welcome";
        Integer visitCount = new Integer(0);
        String visitCountKey = new String("visitCount");
        String userIDKey = new String("userID");
        String userID = new String("ISE-DSCE");
        if (session.isNew()) {
            title = "Welcome to my website";
            session.setAttribute(userIDKey, userID);
        } else {
            visitCount = (Integer)session.getAttribute(visitCountKey);
            visitCount = visitCount + 1;
            userID = (String)session.getAttribute(userIDKey);
        }
        session.setAttribute(visitCountKey, visitCount);
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();

        String docType =
            "<!doctype html public \"-//w3c//dtd html 4.0 \" +
            \"transitional//en\">\n";

        out.println(docType +
            "<html>\n" +
            "<head><title>" + title + "</title></head>\n" +
```

```

"<body bgcolor = \"#f0f0f0\">\n" +
"<h1 align = \"center\">" + title + "</h1>\n" +
"<h2 align = \"center\">Session Infomation</h2>\n" +
"<table border = \"1\" align = \"center\">\n" +

"<tr bgcolor = \"#949494\">\n" +
" <th>Session info</th><th>value</th> </tr>\n" +

"<tr>\n" +
" <td>id</td>\n" +
" <td>" + session.getId() + "</td> </tr>\n" +

"<tr>\n" +
" <td>Creation Time</td>\n" +
" <td>" + createTime + " </td> </tr>\n" +

"<tr>\n" +
" <td>Time of Last Access</td>\n" +
" <td>" + lastAccessTime + " </td> </tr>\n" +

"<tr>\n" +
" <td>User ID</td>\n" +
" <td>" + userID + " </td> </tr>\n" +

"<tr>\n" +
" <td>Number of visits</td>\n" +
" <td>" + visitCount + "</td> </tr>\n" +
"</table>\n" +
"</body> </html>"
);
}
}

```

### Web.xml

```

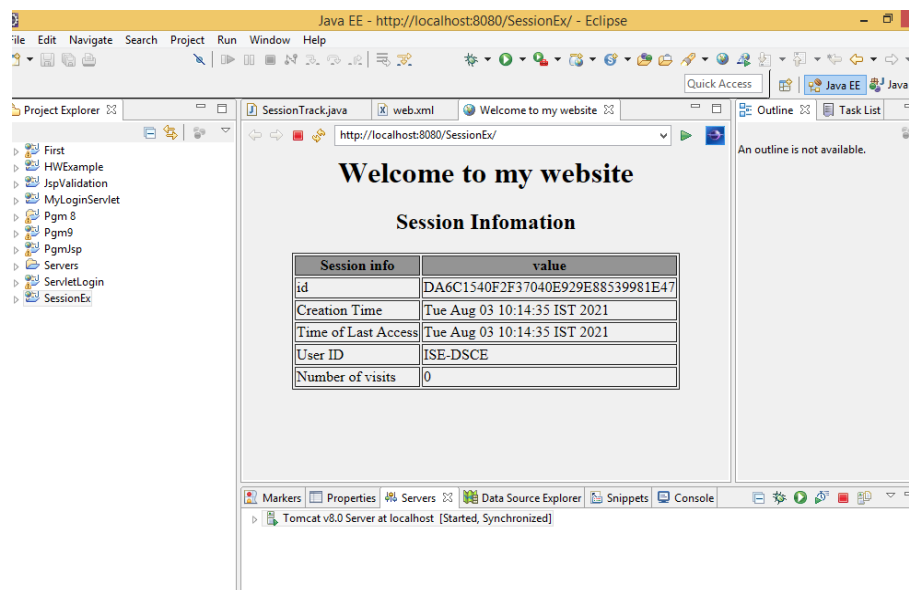
<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://xmlns.jcp.org/xml/ns/javaee"
xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee http://xmlns.jcp.org/xml/ns/javaee/web-
app_3_1.xsd" id="WebApp_ID" version="3.1">

<welcome-file-list>
  <welcome-file>SessionTrack</welcome-file>
</welcome-file-list>

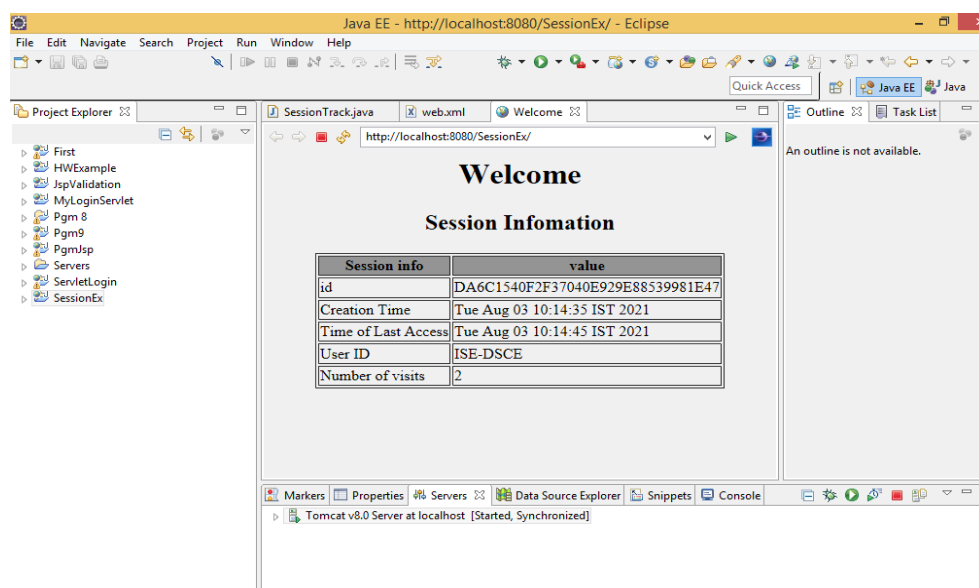
```

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

**Output:**



Session Information for First Visit



Session Information after Two Visits



11. Write a JSP program to implement verification of a particular user login and display a welcome page.

### Welcome.jsp

```
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title> Welcome Page</title>
</head>
<body>
    <center>
        <%! String id; %>
        <% id=request.getParameter("uname"); %>
        <h1> Welcome <%=id%> </h1>
        <br />
        <h1> to the home page </h1>
    </center>
</body>
</html>
```

### Error.jsp

```
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>Insert title here</title>
</head>
<body bgcolor = "pink">
    <h1> INVALID User Credentials !! </h1>
</body>
</html>
```

### Validation.jsp

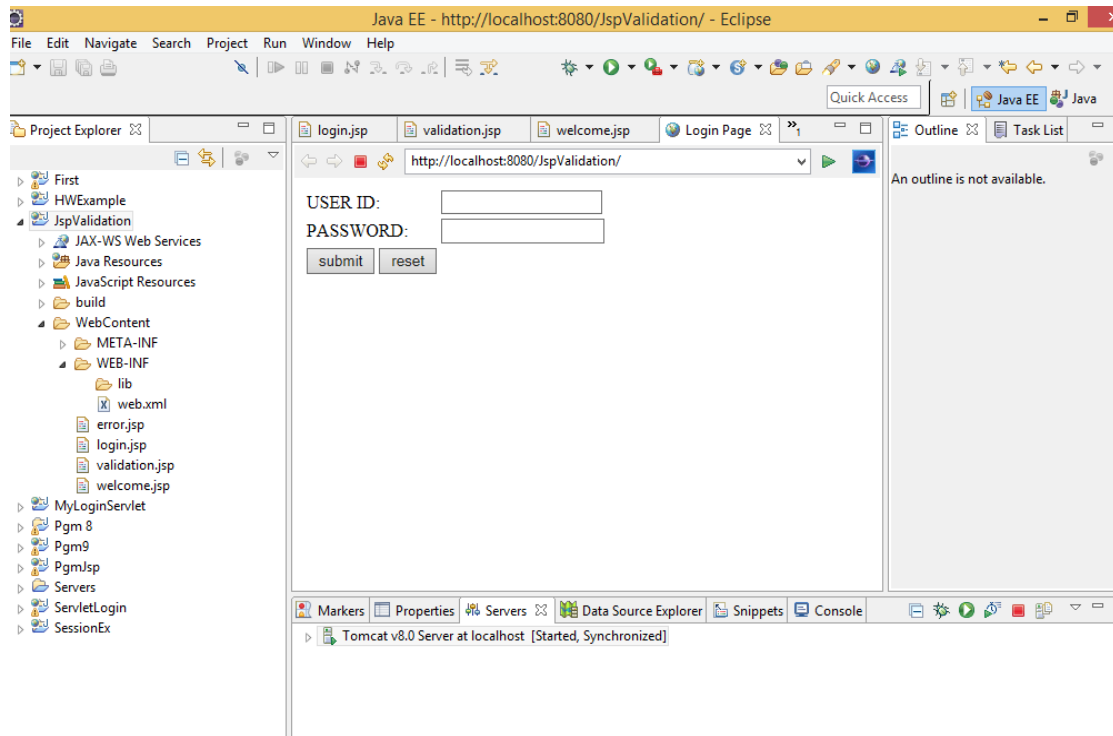
```
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>Validation Page</title>
</head>
<body>
    <%! String uid="ISEStudent"; %>
    <%! String pass="ise-dsce"; %>
    <%! String id, password; %>
    <% id=request.getParameter("uname"); %>
```

```
<% password=request.getParameter("password"); %>
<% if(uid.equals(id)&&pass.equals(password))
{
%>
<jsp:forward page="welcome.jsp"/>
<%
}
else {
%>
<jsp:forward page="error.jsp" />
<%
}
%>
```

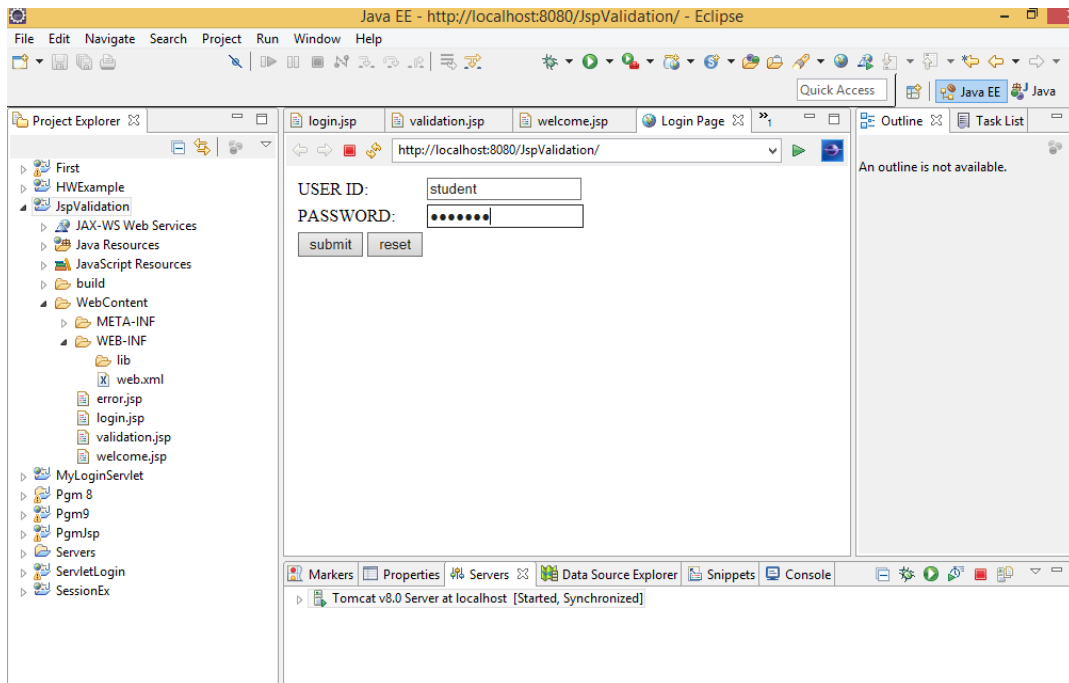
### Login.jsp

```
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title> Login Page </title>
</head>
<body>
<form action="validation.jsp">
<table border="0">
<tr>
<td> USER ID: </td>
<td>
<input type="text" name="uname" /> <br>
</td>
</tr>
<tr>
<td> PASSWORD: </td>
<td>
<input type="password" name="password" /> <br>
</td>
</tr>
<tr> <td align="center">
<input type="submit" value="submit" >
<input type="reset" value="reset">
</td>
</tr>
</table>
</form>
</body>
```

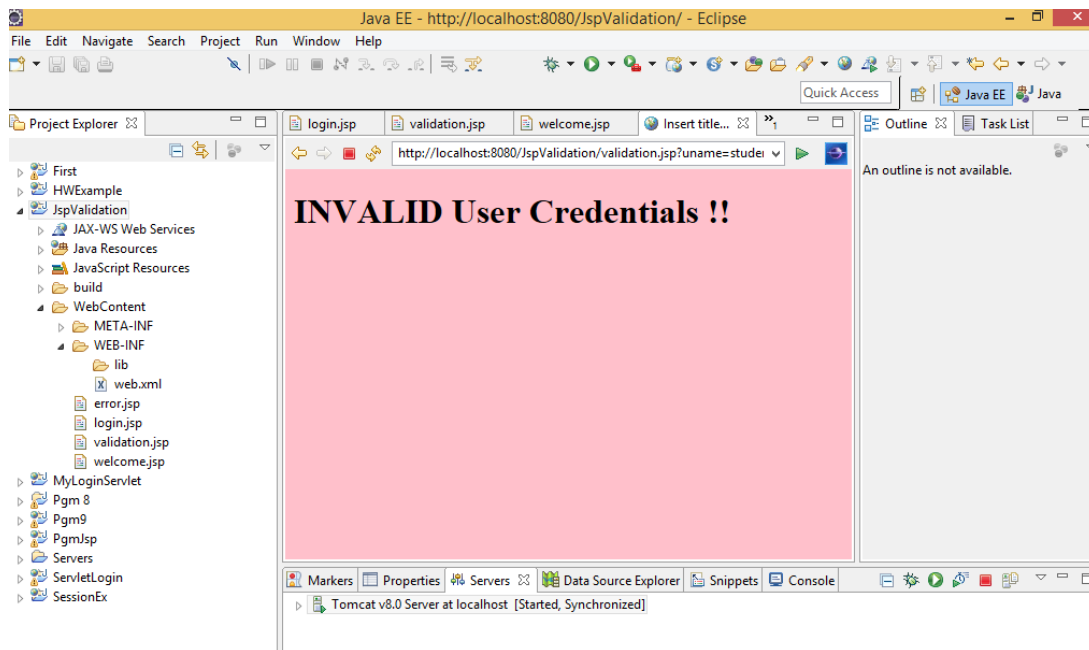
Output:



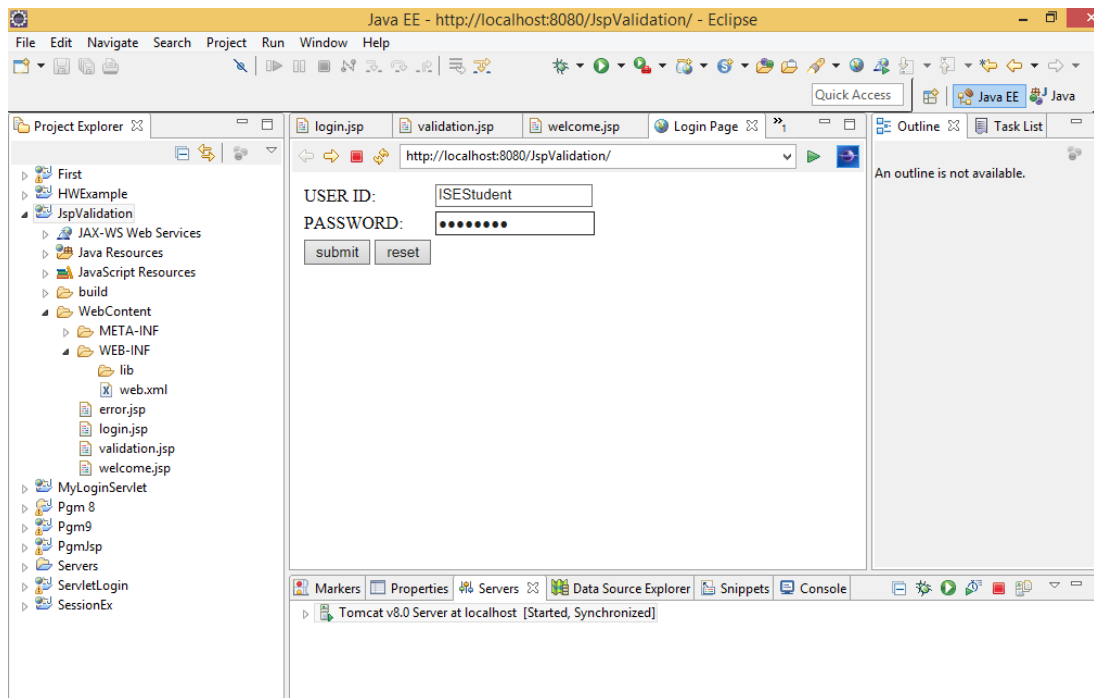
Login Page



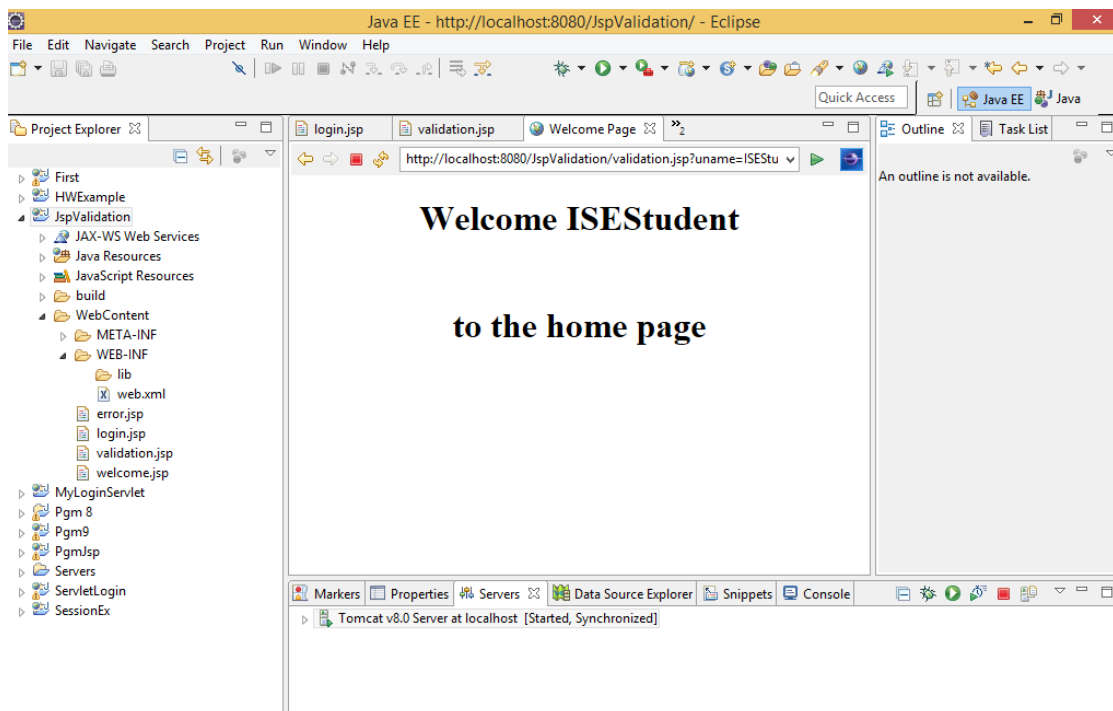
### Invalid User Credentials



### Error Page



Valid Login Credentials



Welcome Page

12. Write a simple JSP program to display a phrase with increasing font size.

fontSz.jsp

```
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>Insert title here</title>
</head>
<body bgcolor= "yellow" >
    <center>
        <b><i>
            <%for ( fontSize = 1; fontSize <= 7; fontSize++){ %>
            <font face="Arial" color = "blue" size = "<%= fontSize %>">
                Java Lab
            <br></br>
            </font>
            <% } %>
        </b></i>
    </center>
</body>
</html>
```

Output:

