Day 5 Classwork:

Qno:1
Create a login form with the following details
1. User-name
2. Password.

Create a table called as "Users" storing all the details of the user login details.

Create two buttons in the webpage - login, new user.

Login button - should use a JSP to read the content of database and print user validation success (if username and password) are correct.
If username & password are wrong, then print "invalid".

new user - should navigate to another page where the user can enter his username and password. These info should be stored in the database.

Program:

Xml file contents:

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

<servlet>
<servlet-name>login</servlet-name>
<servlet-class>code</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>login</servlet-name>
<url-pattern>/login</url-pattern>
</servlet-mapping>

</web-app>
```

Code.java contents:

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

public class code extends HttpServlet {

    public void init() throws ServletException {
    }
    public static String adduser(String username, String password) {
```

```java
        try {
            Connection con = null;
            Class.forName("com.mysql.cj.jdbc.Driver");
            con = DriverManager.getConnection("jdbc:mysql://localhost/stv?useUnicode=true&
useJDBCCompliantTimezoneShift=true&useLegacyDatetimeCode=false&serverTimezone=UTC","root",
 "");
            try {
                java.sql.Statement stmt=con.createStatement();
                int a=stmt.executeUpdate("insert into userdb values('"+username+"','"+pass
word+"');");
                return("success");
            } catch (Exception e) {
                return("Username already exists please try another username");
                // TODO: handle exception
            }
            finally {
                con.close();
            }
        } catch (Exception e) {
            // TODO: handle exception
        }

        return("finished");
    }
    public static String check(String username, String password)
    {
        try {
            Connection con = null;
            Class.forName("com.mysql.cj.jdbc.Driver");
            con = DriverManager.getConnection("jdbc:mysql://localhost/stv?useUnicode=true&
useJDBCCompliantTimezoneShift=true&useLegacyDatetimeCode=false&serverTimezone=UTC","root",
 "");
            try {
                java.sql.Statement stmt=con.createStatement();
                ResultSet rs=stmt.executeQuery("select * from userdb where username like '
"+username+"';");
                while(rs.next())
                {
                if (username.equals(rs.getString(1))){
                    if (rs.getString(2).equals(password)){
                        return("Success you have logged in through my self made service");
                    }
                    else{
                        return("password wrong");
                    }
                }
                }
            } catch (Exception e) {
                return("username does not exists"+username+" -
- " + password + " error : " +e);
                // TODO: handle exception
            }
            finally {
                con.close();
```

```java
            }
        } catch (Exception e) {
            // TODO: handle exception

        }
        return("Finished");
    }
    public void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
            response.setContentType("text/html");
            PrintWriter out = response.getWriter();
            String username="",password="",options="",a="";
            out.println("<html><body><h2>");
            try {
                username=request.getParameter("username");
                password=request.getParameter("password");
                options=request.getParameter("option");

                if (options.equals("n")){
                    out.println(adduser(username,password) );
                }
                else if(options.equals("o")){
                    out.println(check(username,password) );
                }
                else{
                out.println("select a if you are a new user or a Excesting user (1)"+o
ptions);

                }

            }
            catch (Exception e) {
              out.println("Error<br>" + e );
            //   out.println("hello"+ e );

        }
            out.println("</h2></body></html>");

        //   out.println("<html><body>"+ a + i +"</body></html>");
    }

    public void destroy() {
    }
}
```

Html content:

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <link rel="stylesheet" href="style.css">
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Problem 1</title>
</head>
```

```
<body>

  <form action="./../login" method="post">
  <select name="option" id="">
    <option value="n">new user?</option>
    <option value="o">login (Already a user)</option>
  </select>
  <input type="text" name="username" placeholder="User Name" id="">
  <input type="password" name="password" placeholder="password" id="">
  <input type="submit" value="Submit">
</form>

</body>
</html>
```

Q.No 2: create a online product search tool. Insert few details in the dataset (min 10 values). The table products should have the following columns
1. ID
2. Name
3. Price

The user can enter the name of the product to search.

Design a webpage which asks for product name, then design a JSP page which searches the product and display the information.
Program:
Jsp file:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>search products</title>
</head>
<body>
    <%@ page import="java.sql.*" %>
    <form action="./problem2.jsp" method="post">
    <input type="search" name="a" id="">
    <input type="submit" value="search">
    </form>
    <%
    String name="";
    if (request.getParameter("a") != null){
        name=request.getParameter("a");
    }
    try {
            Connection con = null;
            Class.forName("com.mysql.cj.jdbc.Driver");
```

```
            con = DriverManager.getConnection("jdbc:mysql://localhost/stv?useUnicode=true&
useJDBCCompliantTimezoneShift=true&useLegacyDatetimeCode=false&serverTimezone=UTC","root",
 "");
            try {
                out.println("<table> <tr>  <th>Id</th> <th>Name</th>  <th>Price</th> </tr>
");
                java.sql.Statement stmt=con.createStatement();
                ResultSet rs=stmt.executeQuery("select * from  products where name like '"
+name+"';");
                while(rs.next())
                {
                out.println("<tr> <td>"+rs.getInt(1)+"</td><td>"+rs.getString(2)+"</td><td
>"+rs.getInt(3)+"</td></tr>");
                }

            } catch (Exception e) {
                // TODO: handle exception
            }
            finally {
                out.println("</table>");
                con.close();
            }
        } catch (Exception e) {
            // TODO: handle exception
        }
    %>
</body>
</html>
```
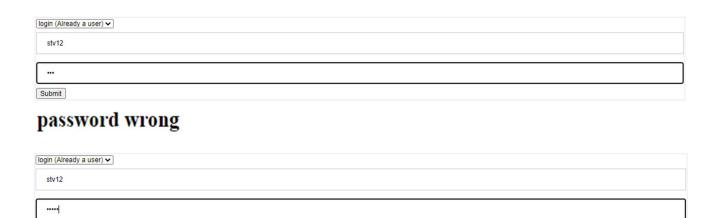
Output:

Output for problem 1:

success

Username already exists please try another username

login (Already a user) ▾

stv12

...

Submit

password wrong

login (Already a user) ▾

stv12

•••••

Submit

Success you have logged in through my self made service

Output for problem 2:

scale | search

Id Name Price

10 scale 20

10 scale 20

10 scale 20