Prepare Servlet application login using session tracking and database connectivity.

First_page.java

```
1.   import java.io.IOException;
2.   import java.io.PrintWriter;
3.   import java.sql.Connection;
4.   import java.sql.Date;
5.   import java.sql.DriverManager;
6.   import java.sql.ResultSet;
7.   import java.sql.Statement;
8.   import javax.servlet.ServletException;
9.   import javax.servlet.http.HttpServlet;
10.  import javax.servlet.http.HttpServletRequest;
11.  import javax.servlet.http.HttpServletResponse;
12.  import javax.servlet.http.HttpSession;
13.
14.  public class first_page extends HttpServlet {
15.
16.    protected void processRequest(HttpServletRequest request, HttpServletResponse
       response)
17.         throws ServletException, IOException {
18.      response.setContentType("text/html;charset=UTF-8");
19.      HttpSession session;
20.      String struname=request.getParameter("uname");
21.      String strpass =request.getParameter("pass");
22.      try (PrintWriter out = response.getWriter()) {
23.        try
24.        {
25.        Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
26.        Connection cn=DriverManager.getConnection("jdbc:odbc:UserDB");
27.        Statement st=cn.createStatement();
28.        ResultSet    rs=st.executeQuery("select    *    from    login    where
       username='"+struname+"' and password='"+strpass+"'");
29.        out.println("<!DOCTYPE html>");
30.        out.println("<html>");
31.        out.println("<head>");
32.        out.println("<title>User Detail</title>");
33.        out.println("</head>");
34.        out.println("<body>");
35.        out.println("<form method='POST' action='session'>");
36.        out.println("<div style=\"margin-top:200px;\"");
37.        session=request.getSession(true);
38.        if(rs.next())
39.        {
40.          session=request.getSession(true);
```

```
41.            if(session.getAttribute("user")==null)
42.            {
43.                session.setAttribute("user",rs.getString(2));
44.            }
45.        }
46.        if(session.getAttribute("user")!=null)
47.        {
48.
49.
50.        out.println("<table align='center'>");
51.        out.println("<tr><td><font            color=\"green\">Log        In
    Success</font></td><td></td></tr>");
52.        out.println("<tr>  <td>  <br>Welcome, "+session.getAttribute("user"));
53.        out.println("</tr>  </td>");
54.        out.println("<tr>    <td>      </td>    <td><input type='submit' name='submit'
    value='LogOut'>");
55.        }
56.        else
57.        {
58.        out.println("<table align='center'>");
59.        out.println("<tr><td><font color=\"red\">Sorry, You have entered an invalied
    user name or password</font></td></tr>");
60.        out.println("<tr><td><font            color=\"red\"><br>Please        Try
    Again</font></td></tr>");
61.        out.println("</table");
62.        }
63.        out.println("</div>");
64.        out.println("</body>");
65.        out.println("</html>");
66.        }
67.        catch(Exception e)
68.        {
69.            out.println("Error Message for Database : "+e.toString());
70.        }
71.      }
72.    }
73.    // <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign
    on the left to edit the code.">
74.    /**
75.     * Handles the HTTP <code>GET</code> method.
76.     *
77.     * @param request servlet request
78.     * @param response servlet response
79.     * @throws ServletException if a servlet-specific error occurs
80.     * @throws IOException if an I/O error occurs
81.     */
```

```
82.    @Override
83.    protected void doGet(HttpServletRequest request, HttpServletResponse response)
84.        throws ServletException, IOException {
85.      processRequest(request, response);
86.      HttpSession session = request.getSession(true);
87.      Date creatTime = new Date(session.getCreationTime());
88.
89.
90.    }
91.
92.    /**
93.     * Handles the HTTP <code>POST</code> method.
94.     *
95.     * @param request servlet request
96.     * @param response servlet response
97.     * @throws ServletException if a servlet-specific error occurs
98.     * @throws IOException if an I/O error occurs
99.     */
100.   @Override
101.   protected void doPost(HttpServletRequest request, HttpServletResponse response)
102.       throws ServletException, IOException {
103.     processRequest(request, response);
104.   }
105.
106.   /**
107.    * Returns a short description of the servlet.
108.    *
109.    * @return a String containing servlet description
110.    */
111.   @Override
112.   public String getServletInfo() {
113.      return "Short description";
114.   }// </editor-fold>
115.}
```

Session.java

```
1.   import java.io.IOException;
2.   import java.io.PrintWriter;
3.   import javax.servlet.ServletException;
4.   import javax.servlet.http.HttpServlet;
5.   import javax.servlet.http.HttpServletRequest;
6.   import javax.servlet.http.HttpServletResponse;
7.   import javax.servlet.http.HttpSession;
8.   import java.net.*;
9.
10.  public class session extends HttpServlet {
11.
12.
13.     protected void processRequest(HttpServletRequest request, HttpServletResponse
     response)
14.          throws ServletException, IOException {
15.       response.setContentType("text/html;charset=UTF-8");
16.       try (PrintWriter out = response.getWriter()) {
17.          HttpSession session;
18.          session=request.getSession(true);
19.          session.setAttribute("user", null);
20.          session.invalidate();
21.          out.println("<!DOCTYPE html>");
22.          out.println("<html><script type='text/javascript'> windows.location('index.html');
     alert('Jekil'); </script>");
23.          out.println("<head>");
24.          out.println("<title>Servlet session</title>");
25.          out.println("</head>");
26.          out.println("<body>");
27.          out.println("<h1>Servlet session at </h1>");
28.          response.sendRedirect("index.html");
29.          out.println("</body>");
30.          out.println("</html>");
31.       }
32.     }
33.
34.
35.     @Override
36.     protected void doGet(HttpServletRequest request, HttpServletResponse response)
37.          throws ServletException, IOException {
38.       processRequest(request, response);
39.     }
40.
41.
```

```
42.    @Override
43.    protected void doPost(HttpServletRequest request, HttpServletResponse response)
44.          throws ServletException, IOException {
45.       processRequest(request, response);
46.    }
47.
48.
49.    @Override
50.    public String getServletInfo() {
51.       return "Short description";
52.    }
53.
54. }
```

Index.html

```
1.  <!DOCTYPE html>
2.  <!--
3.  To change this license header, choose License Headers in Project Properties.
4.  To change this template file, choose Tools | Templates
5.  and open the template in the editor.
6.  -->
7.  <html>
8.     <head>
9.        <title>User Info</title>
10.       <meta charset="UTF-8">
11.       <meta name="viewport" content="width=device-width, initial-scale=1.0">
12.    </head>
13.    <body>
14.       <form method="POST" action="first_page">
15.          <div style="margin-top:200px;">
16.          <table border="0" align="center">
17.             <th colspan="3" align="Left"><h2>Login</h2></th>
18.             <tr>
19.                <td>User Name</td>
20.                <td>:</td>
21.                <td><input type="text" name="uname" ></td>
22.             </tr>
23.             <tr>
24.                <td>Password</td>
25.                <td>:</td>
26.                <td><input type="password" name="pass" ></td>
27.             </tr>
28.             <tr>
29.                <td></td>
30.                <td></td>
31.                <td><input type="submit" name="submit" value="Submit"></td>
```

32.   </tr>
33.   </table>
34.   </div>
35.   </form>
36.   </body>
37. </html>

OUTPUT

Login

User Name : [   ]
Password   : [   ]
                [Submit]

Log In Success

Welcome, Jekil

Log IN Success   **Login Screen**

Sorry, You have entered an invalied user name or password

Please Try Again

Incorrect User name or Password.