# Practical 1a:

**index .html**

<html>

<head>

<title>Calculator</title>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

</head>

<body>

<form method="POST" action="CalcServlet">

Num 1: <input type="text" name="t1"> <br>

Num 2: <input type="text" name="t2"><br>

<br><br>

<input type="submit" value="+" name="btn">

<input type="submit" value="-" name="btn">

<input type="submit" value="\*" name="btn">

<input type="submit" value="/" name="btn">

</form>

</body>

</html>

**CalcServlet. java**

package mypack;

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 CalcServlet extends HttpServlet {

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

response.setContentType("text/html;charset=UTF-8"); try (PrintWriter out = response.getWriter())

{

int a = Integer.parseInt(request.getParameter("t1"));

int b = Integer.parseInt(request.getParameter("t2"));

String op = request.getParameter("btn");

int c = 0;

if(op.equals("+"))

{

c = a + b;

}

else if (op.equals("-"))

{

c = a-b;

}

else if(op.equals("\*"))

{

c = a\*b;

}

else if (op.equals("/"))

{

c = a/b;

}

out.println("<b>" + a + op + b + "=" + c + "</b>")

}

}

@Override

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

processRequest(request, response);

}

@Override

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

{

processRequest(request, response);

}

@Override

public String getServletInfo() { return "Short description";

}

}

# Practical 1b

## Index.html

<html>

<head>

<title>Login Page</title>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

</head>

<body>

<form method="POST" action="LoginServlet">

username: <input type="text" name="uname">

password: <input type="password" name="pw">

<br>

<input type="submit" name="btn" value="login">

</form>

</body>

</html>

## LoginServlet.java

package mypack;

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 LoginServlet extends HttpServlet {

protected void processRequest(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException { response.setContentType("text/html;charset=UTF-8"); try (PrintWriter out = response.getWriter())

{

String username = request.getParameter("uname");

String password = request.getParameter("pw");

if((username.equals("admin")) && (password.equals("pass")))

{

out.println("Hello Admin");

}

else

{

out.print("Login Failed");

}

}

}

@Override

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

processRequest(request, response);

}

@Override

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

{

processRequest(request, response);

}

@Override

public String getServletInfo()

{

return "Short description";

}

}

# Practical 1c

## Index.html

<html>

<head>

<title>Practical 1c</title>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

</head>

<body>

<form method="POST" action="RegisterServlet">

Username: <input type="text" name="uname"> <br>

Password: <input type="password" name="pw1"> <br>

Re:Enter Password <input type="password" name="pw2"> <br>

Email: <input type="text" name="email"> <br>

Country: <select name="Con">

<option>India</option>

<option>Japan</option>

<option>China</option>

<option>Korea</option>

</select>

<br>

<input type="submit" value="Register">

<input type="RESET">

</form>

</body>

</html>

## RegisterServlet.java

package mypack;

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; import java.sql.\*;

import java.io.\*;

import javax.servlet.http.\*;

public class RegisterServlet extends HttpServlet {

protected void processRequest(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException { response.setContentType("text/html;charset=UTF-8"); PrintWriter out = response.getWriter();

String uname = request.getParameter("uname");

String pass1 = request.getParameter("pw1");

String pass2 = request.getParameter("pw2");

String email = request.getParameter("email");

String ctry = request.getParameter("Con");

if(pass1.equals(pass2))

{

try

{

Class.forName("org.apache.derby.jdbc.EmbeddedDriver");

Connection con = DriverManager.getConnection("jdbc:derby://localhost:1527/Practical1c", "root","root");

PreparedStatement stmt = con.prepareStatement("insert into Registration values (?,?,?,?)");

stmt.setString(1, uname);

stmt.setString(2, pass1);

stmt.setString(3, email);

stmt.setString(4, ctry);

int row = stmt.executeUpdate();

if (row == 1)

{

out.println("Registration Successful");

}

else

{

out.println("Registration Failed");

}

}

catch(Exception e)

{

out.print("Exception" + e);

}

}

}

@Override

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

processRequest(request, response);

}

@Override

protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

processRequest(request, response);

}

@Override

public String getServletInfo() { return "Short description";

}

}