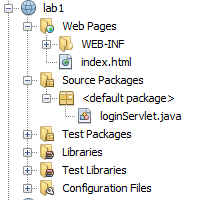
1. Write a JAVA Servlet Program to implement a dynamic HTML using Servlet (user name and

Password should be accepted using HTML and displayed using a Servlet).

**Project Structure**



**Index.html**Top of Form

<html>

<head><title>login</title> </head>

<body>

<form action="loginServlet" method="get">

<fieldset>

<legend>Login Form</legend>

Username:<input type="text" name="username"/><br/></br>

Password: <input type="password" name="pass"/><br/></br>

<input type="submit" value="send"/>

<input type="reset" value="clear"/>

</fieldset>

</form>

</body>

</html>

**loginServlet.java**

output:

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 {

@Override

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

PrintWriter out = response.getWriter();

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

String secretword=request.getParameter("pass");

out.println("<html>");

out.println("<head><title>Servlet</title></head>");

out.println("<body>");

out.println("<fieldset>");

out.println("<h2>You have Entered</h2>");

out.println("<p>Name: " + name + "</p>");

out.println("<p> Password: " +secretword+"</p>");

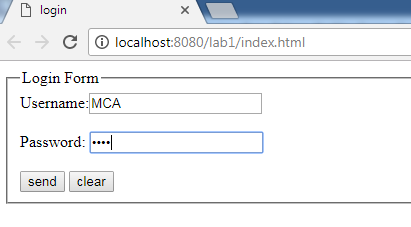
out.println("</fieldset>");

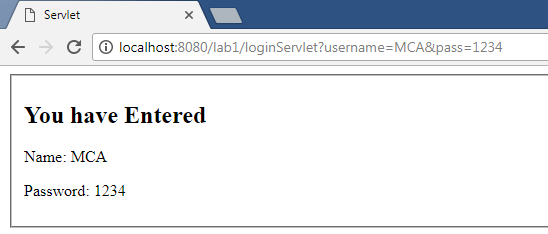
out.println("</body>");

out.println("</html>");

}

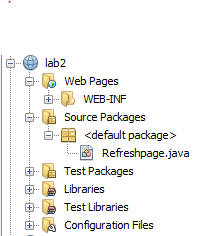
}





1. Write a JAVA Servlet Program to Auto Web Page Refresh

**Project Structure**



**Refresh.java**

import java.io.IOException;

import java.io.PrintWriter;

import java.util.\*;

import javax.servlet.ServletException;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

public class Refreshpage extends HttpServlet {

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

response.setContentType("text/html;charset=UTF-8");

PrintWriter out = response.getWriter();

response.addHeader("Refresh", "3");

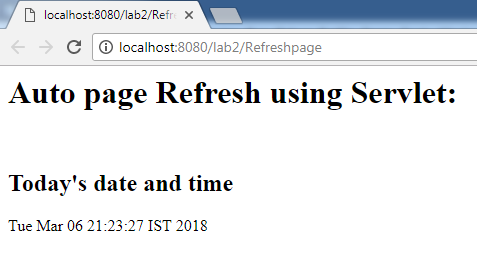
out.println("<h1>Auto page Refresh using Servlet: </h1>");

out.println("<br><h2>Today's date and time </h2>"+new Date());

}

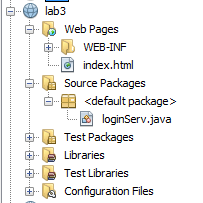
}

**output**



1. Write a java servlet program to implement and demonstrate get() and post() methods

**Project structure**



Index.html

<html>

<head>

<title>TODO supply a title</title> </head>

<body>

<form action="loginServ" method="get">

<h2> Using Get method</h2>

<h3> UserName: <input type="text" name="uname"/></h3>

<h3> Password:<input type="password" name="pwd"/></h3>

<input type="submit" value="get()"/>

<input type="reset">

<hr>

</form>

<form action="loginServ" method="post">

<h2> Using Post method</h2>

<h3> UserName: <input type="text" name="uname1"/></h3>

<h3> Password:<input type="password" name="pwd1"/></h3>

<input type="submit" value="post()"/>

<input type="reset">

<hr>

</form>

</body>

</html>

**loginServ.java**

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 loginServ extends HttpServlet {

@Override

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

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

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

PrintWriter out=response.getWriter();

out.println("<!DOCTYPE html>");

out.println("<html>");

out.println("<head><title>Servlet loginServ</title></head>");

out.println("<body>");

out.println("<h1>Details of Get()</h1>");

out.println("<h1>username: " + uname+ "</h1>");

out.println("<h1>password: " + pwd+ "</h1>");

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

}

@Override

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

String uname1 = request.getParameter("uname1");

String pwd1=request.getParameter("pwd1");

PrintWriter out=response.getWriter();

out.println("<!DOCTYPE html>");

out.println("<html>");

out.println("<head>");

out.println("<title>Servlet loginServ</title>");

out.println("</head>");

out.println("<body>");

out.println("<h1>Details of Post()</h1>");

out.println("<h1>username: " + uname1+ "</h1>");

out.println("<h1>password: " + pwd1+ "</h1>");

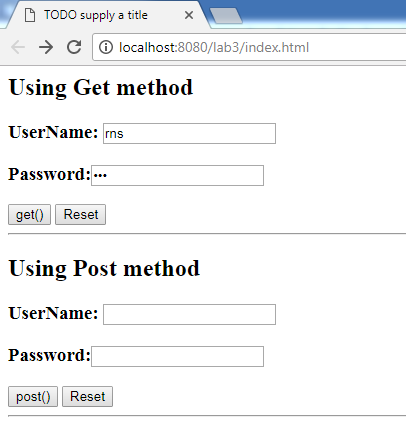
out.println("</body>");

out.println("</html>");

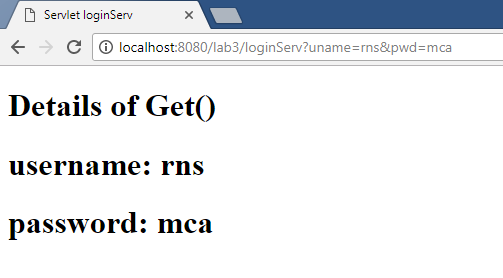
}

}

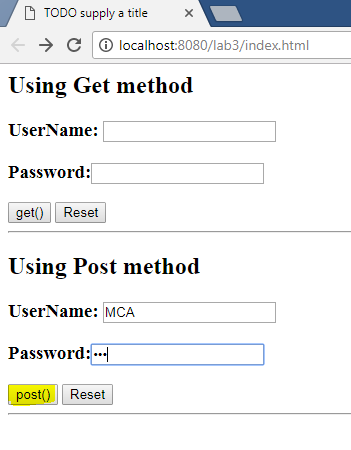
**Output**

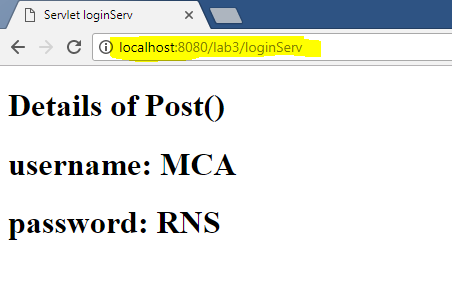


**Get request**

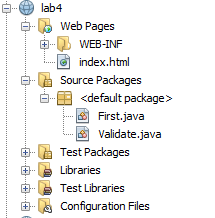


**Post request**





**4.** Write a JAVA Servlet Program using cookies to remember user preferences



**Index.html**

<html>

<head>

<title>cookie example</title>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width">

</head>

<body>

<form method="post" action="Validate">

<fieldset>

<h2> Setting cookie </h2>

<h3>Name: <input type="text" name="user" /></h3>

<h3>Password:<input type="password" name="pass" /></h3>

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

</fieldset>

</form>

</body>

</html>

**Validate.java**

import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.ServletException;

import javax.servlet.http.Cookie;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

public class Validate extends HttpServlet {

@Override

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

String name = request.getParameter("user");

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

if(pass.equals("1234"))

{

Cookie ck = new Cookie("username",name);

response.addCookie(ck);

response.sendRedirect("First");

}

}

}

**First.java**

import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.ServletException;

import javax.servlet.http.Cookie;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

public class First extends HttpServlet {

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

PrintWriter out = response.getWriter();

//read cookie

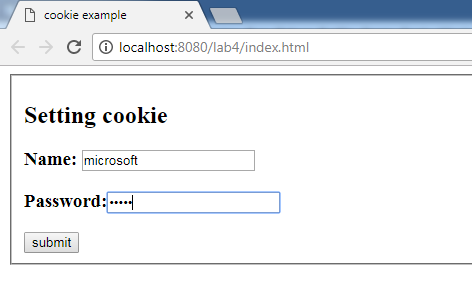
Cookie[] cks = request.getCookies();

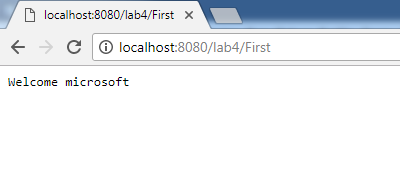
out.println("Welcome "+cks[0].getValue());

}

}

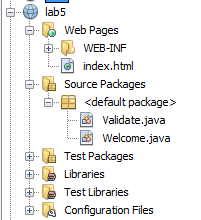
**Output:**





**5.** Write a JAVA Servlet program to track HttpSession by accepting user name and password using

HTML and display the profile page on successful login.



**Index.html**

<html>

<head>

<title>setting session</title>

</head>

<body>

<form method="post" action="Validate">

<fieldset>

<h2> Setting session </h2>

<h3>Name: <input type="text" name="user" /></h3>

<h3>Password:<input type="password" name="pass" /></h3>

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

</fieldset>

</form>

</body>

</html>

**Validate.java**

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 javax.servlet.http.HttpSession;

public class Validate extends HttpServlet {

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

String name = request.getParameter("user");

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

if(pass.equals("1234"))

{

//creating a session

HttpSession session = request.getSession();

session.setAttribute("user", name);

response.sendRedirect("Welcome");

}

}

}

**Welcome.java**

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 javax.servlet.http.HttpSession;

public class Welcome extends HttpServlet {

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

PrintWriter out = response.getWriter();

// getting session

HttpSession session = request.getSession();

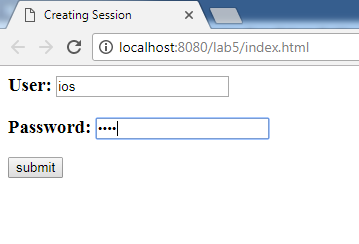
String user = (String)session.getAttribute("user");

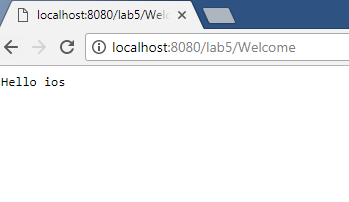
out.println("Hello "+user);

}

}

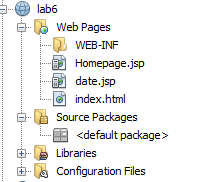
Output





6. Write a JAVA JSP Program which uses jsp:include and jsp:forward action to display a Webpage.

**Project Structure:**



Index.html

<!DOCTYPE html>

<html>

<head>

<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">

<title>JSP Page</title></head>

<body>

<form action="Homepage.jsp" method="post">

<h2> Enter your birth date </h2>

Date: <input type="text" name="day"/>

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

<input type="reset" value="clear"/>

</form>

</body>

</html>

Homepage.jsp

<%@page import="java.util.Date"%>

<%@page import="java.util.GregorianCalendar"%>

<%@page import="java.util.Calendar"%>

<!DOCTYPE html>

<html>

<head>

<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">

<title>Homepage</title>

</head>

<body>

<h1>Happy Birthday</h1>

<%

Date date = new Date();

int udate = Integer.parseInt(request.getParameter("day"));

%>

<%if(udate==(date.getDate())){ %>

<jsp:include page="date.jsp"/>

<%}else{ %>

<jsp:forward page="date.jsp"/>

<%}%>

</body>

</html>

**date.jsp**

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

<!DOCTYPE html>

<html>

<head>

<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">

<title>welcome</title> </head>

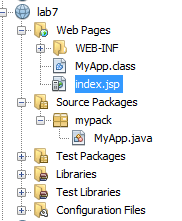
<body>

<h1>**Welcome to home page**</h1>

</body>

</html>

7. Write a JAVA JSP program which uses <jsp:pulgin> tag to run an applet.



**Index.html**

<%@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>Applet Demo</h1>

<jsp:plugin type="applet" code="MyApp.class" height="500" codebase="mypack" width="500">

<jsp:fallback>

unable to load

</jsp:fallback>

</jsp:plugin>

<h4><font color=red>

The above applet is loaded using the Java Plugin from a jsp page using the plugin tag

</font>

</body>

</html>

**MyApp.java**

package mypack;

import java.applet.Applet;

import java.awt.Color;

import java.awt.Graphics;

public class MyApp extends Applet {

public void init() {

// TODO start asynchronous download of heavy resources

}

public void paint(Graphics g){

setBackground(Color.red);

setForeground(Color.blue);

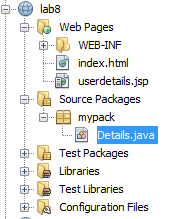
g.drawString("hello from jsp", 100, 200);

}

}

8. Write a JAVA JSP Program to get student information through a HTML and create a JAVA Bean

class, populate Bean and display the same informationthrough another JSP



**Index.html**

<!DOCTYPE html>

<html>

<head>

<title>Student Info</title>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width">

</head>

<body>

<form action="userdetails.jsp" method="post">

<center><h2> Enter the student details </h2>

<p> Name: <input type="text" name="user"><br> </p>

<p>USN: <input type="text" name="usn"><br> </p>

<p>Branch: <input type="text" name="branch"><br></p>

<input type="submit" value="register"> </center>

</form>

</body>

</html>

**userdetails.jsp**

<!DOCTYPE html>

<html>

<head>

<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">

<title>JSP Page</title>

</head>

<body>

<jsp:useBean id="userinfo" class="mypack.Details">

</jsp:useBean>

<jsp:setProperty property="\*" name="userinfo" />

<strong> Entered Details are below: </strong>

<p>

<jsp:getProperty property="username" name="userinfo"/><br>

<jsp:getProperty property="usn" name="userinfo"/><br>

<jsp:getProperty property="branch" name="userinfo" /><br>

</p>

</body>

</html>

**Details.java**

package mypack;

import java.io.Serializable;

public class Details implements Serializable{

private String username;

private String branch;

private String usn;

public Details() {

}

public String getBranch() {

return branch;

}

public void setBranch(String branch) {

this.branch = branch;

}

public String getUsn() {

return usn;

}

public void setUsn(String usn) {

this.usn = usn;

}

public String getUsername() {

return username;

}

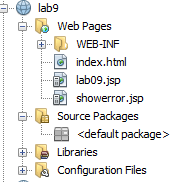
public void setUsername(String username) {

this.username = username;

}

}

9. Write a JSP program to implement all the attributes of page directive tag.



Index.html

|  |
| --- |
| <html>  <head>  <title>page attribute</title>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width">  </head>  <body>  <h2>Read two value to divide</h2>  <form action="lab09.jsp">  Enter First Value:<input type="text" name="val1"/><br>  Enter Second Value:<input type="text" name="val2"/><br>  <input type="submit" value="Calculate"/>  </form>  </body>  </html> |

Lab09.jsp

|  |
| --- |
| **<%@page import="java.util.Date"**  **contentType="text/html"**  **pageEncoding="UTF-8"**  **session="true"**  **buffer="16kb"**  **autoFlush="true"**  **isThreadSafe="true"**  **isELIgnored="false"**  **extends="org.apache.jasper.runtime.HttpJspBase"**  **info="Lab 10: demo of all page directive" language="java"**  **errorPage="showerror.jsp"**  **%>**  <!DOCTYPE html>  <html>  <head>  <title>JSP Page</title> </head>  <%! int a, b;  Date d=new Date();%>  <body>  <h2>Welcome! Today is <%= d.getDate()%></h2>  <%  String str1=request.getParameter("val1");  String str2=request.getParameter("val2");  a=Integer.parseInt(str1);  b=Integer.parseInt(str2);%>  <h2>Using Expression Language</h2>  A= ${param.val1}<br>  B= ${param.val2}<br>  <h3>Result: <%= a / b %></h3>  </body>  </html> |

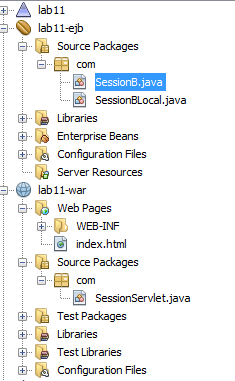
showerror.jsp

|  |
| --- |
| **<%@page isErrorPage="true"%>**  <!DOCTYPE html> <html>  <head>  <title>JSP Page</title> </head>  <body>  **<h3>Sorry an exception occured!</h3>**  **<h2>The exception is: <%= exception %>** </h2> </body>  </html> |

10. Write a JAVA Program to insert data into Student DATA BASE and retrieve info based on particular queries(For example update, delete, search etc…)

|  |
| --- |
| import java.sql.\*;  import java.util.Scanner;  public class Student  {  Connection con;  public void establishConnection()throws ClassNotFoundException,SQLException  {  Class.forName("com.mysql.jdbc.Driver");  con=DriverManager.getConnection("jdbc:mysql://localhost:3306/studentlogin","root","rnsit");  }  public void sInsert(String usn, String name, String dept)throws ClassNotFoundException, SQLException  {  PreparedStatement pst=null;  establishConnection();  try  {  if(con!=null)  {  pst=con.prepareStatement("insert into student values(?,?,?)");  pst.setString(1, usn);  pst.setString(2,name);  pst.setString(3,dept);  int i=pst.executeUpdate();  if(i==1)  {  System.out.println("Record inserted successfully");  } } }  catch(SQLException e)  {  System.err.println(e.getMessage());  }  finally  {  pst.close();  con.close();  } }  public void sSelect(String usn)throws ClassNotFoundException,SQLException  {  PreparedStatement pst=null;  ResultSet res;  establishConnection();  try  {  if(con!=null)  {  pst=con.prepareStatement("select \* from student where usn=?");  pst.setString(1, usn);  res=pst.executeQuery();  if(res.next())  {  System.out.println("USN= "+res.getString(1)+"\tName="+ res.getString(2)+ "\tDepartment= "+res.getString(3));  } } }  finally  {  pst.close();  con.close();  } }  public void sUpdate(String usn, String name, String dept)throws ClassNotFoundException, SQLException  {  PreparedStatement pst=null;  establishConnection();  try  {  if(con!=null)  {  pst=con.prepareStatement("update student set name=?,dept=? where usn=?");  pst.setString(1, name);  pst.setString(2,dept);  pst.setString(3,usn);  int i=pst.executeUpdate();  System.out.println(i);  if(i==1)  {  System.out.println("Record updated successfully");  } } }  finally  {  pst.close();  con.close();  } }  public void sDelete(String usn)throws ClassNotFoundException, SQLException  {  PreparedStatement pst=null;  establishConnection();  try  {  if(con!=null)  {  pst=con.prepareStatement("delete from student where usn=?");  pst.setString(1, usn);  int i=pst.executeUpdate();  if(i==1)  {  System.out.println("Record deleted successfully");  } } }  catch(SQLException e)  {  System.err.println(e.getMessage());  }  finally  {  pst.close();  con.close();  } }  public void viewAll( )throws ClassNotFoundException, SQLException  {  PreparedStatement pst=null;  ResultSet res;  establishConnection();  try  {  if(con!=null)  {  pst=con.prepareStatement("select \* from student");  res=pst.executeQuery();  while(res.next())  {  System.out.println("USN= "+res.getString(1)+"\tName="+res.getString(2)+"\tDepartment= "+res.getString(3));  } } }  catch(SQLException e)  {  System.err.println(e.getMessage());  }  finally  {  pst.close();  con.close();  } }  public static void main(String[] a) throws ClassNotFoundException, SQLException  {  Student std=new Student();  String usn,name,dept;  Scanner sc=new Scanner(System.in);  while(true)  {  System.out.println("Operations on Student table");  System.out.println("1.Insert\n2.Select\n3.Update\n4.Delete\n5.View All\n6.Exit");  System.out.println("select the operation");  switch(sc.nextInt())  {  case 1: System.out.println("Enter USN to insert");  usn=sc.next();  System.out.println("Enter Name to insert");  name=sc.next();  System.out.println("Enter Deaprtment to insert");  dept=sc.next();  std.sInsert(usn, name, dept);  break;  case 2: System.out.println("Enter USN to select");  usn=sc.next();  std.sSelect(usn);  break;  case 3: System.out.println("Enter USN to update");  usn=sc.next();  System.out.println("Enter Name to update");  name=sc.next();  System.out.println("Enter department to update");  dept=sc.next();  std.sUpdate(usn, name, dept);  break;  case 4: System.out.println("Enter USN to delete");  usn=sc.next();  std.sDelete(usn);  break;  case 5: std.viewAll();  break;  case 6: System.exit(0);  default: System.out.println("Invalid operation");  break;  }  }  }  } |

11. An EJB application that demonstrates Session bean



**SessionB.java**

package com;

import javax.ejb.Stateless;

@Stateless

public class SessionB implements SessionBLocal {

@Override

public int Square(int side) {

**return side\*side;**

}

}

**SessionBLocal**

package com;

import javax.ejb.Local;

@Local

public interface SessionBLocal {

int Square(int side);

}

**index.html**

<!DOCTYPE html>

<html>

<head>

<title>lab11</title>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width">

</head>

<body>

<form action="SessionServlet">

Enter the number:

<input type="text" name="num"/><br>

<input type="submit"/>

</form>

</body>

</html>

**SessionServlet.java**

package com;

import java.io.IOException;

import java.io.PrintWriter;

import javax.ejb.EJB;

import javax.servlet.ServletException;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

public class SessionServlet extends HttpServlet {

@EJB

private SessionBLocal sessionB;

@Override

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

**PrintWriter out=response.getWriter();**

**int i, result;**

**i=Integer.parseInt(request.getParameter("num"));**

**result=sessionB.Square(i);**

**out.println("the result "+result);**

}

}

Output:

