

Pg No.1 Slip No.1

A)

Q) Create a servlet for login page. If the username and password are correct then it says "Hello" else log in failed.

Index.html

```
<html>

  <head>

    <title>Log in </title>

    <meta charset="UTF-8">

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

  </head>

  <body>

    <form action="serv1" method="post">

      UserName:<input type="text" name="u1"><br>

      Password:<input type="password" name="p1"><BR>

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

    </form>

  </body>

</html>
```

Serv1.java

```
String a=request.getParameter("u1");

String b=request.getParameter("p1");

if(b.equals("tyit"))

{

    out.print("<h1>Hello"+ a+"</h1>");

}

else

{
```

```
        out.print("<h1>Login Failed!!!!</h1>");  
    }  
}
```

B)

Q) Develop a simple JSP application to display values obtained from the use of implicit objects of various types

Home.jsp

```
<html>  
  
    <head>  
  
        <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">  
  
        <title>implicit object example</title>  
  
    </head>  
  
    <body>  
  
        <form action="welcome.jsp" method="post">  
  
            Enter Name:<input type="text" name="n1">  
  
            <input type="submit" value="go">  
  
        </body>  
  
    </form>  
  
</html>
```

Welcome.jsp

```
<html>  
  
    <head>  
  
        <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">  
  
        <title>JSP Page</title>  
  
    </head>  
  
    <body>  
  
        <h1>Example of implicit objects</h1>  
  
        <% out.print("Today is:"+java.util.Calendar.getInstance().getTime());  
  
        String n=request.getParameter("n1");
```

```

        out.print("<br><h1>Welcome"+n+"</h1>");
    %>

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

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

    </form>

</body>

</html>

```

Response.jsp

```

<html>

<head>

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

    <title>response implicit object</title>

</head>

<body>

    <%

        response.sendRedirect("http://www.google.com");

    %>

</body>

</html>

```

Pg No:1 Slip No:2

A)

Q) Create a registration servlet in java using JDBC. Accept Username ,password ,email, and County from the user using HTML and store in database.

Index.html

```

<html><head><title>Registration Page</title></head>

<body>

<form action="RegisterServlet" >

```

```

<H1>Welcome to Registration page</H1>

Enter User Name <input type="text" name="txtUid"><br>

Enter Password <input type="password" name="txtPass"><br>

Enter Email <input type="text" name="txtEmail" ><br>

Enter Country<input type="text" name="c"><br>

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

</form>

</body></html>

```

RegisterServlet.java

```

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

PrintWriter out = response.getWriter();

String id = request.getParameter("txtUid");

String ps = request.getParameter("txtPass");

String em = request.getParameter("txtEmail");

String co = request.getParameter("c");

try{

Class.forName("com.mysql.jdbc.Driver");

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

PreparedStatement pst = con.prepareStatement("insert into usertable values(?,?,?,?)");

pst.setString(1,id);

pst.setString(2,ps);

pst.setString(3,em);

pst.setString(4,co);

int row = pst.executeUpdate();

out.println("<h1>"+row+ " Inserted Succesfullyyyyyy");

}catch(Exception e){out.println(e);}

```

B)

Q) Develop a JSP application to allow the user to modify the registration details after the valid authentication.

Register.jsp

```
<%--
```

```
Document : Register
```

```
Created on : 4 Oct, 2019, 11:34:40 PM
```

```
Author : TEJAS
```

```
--%>
```

```
<%@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>
```

```
<form action="reg" >
```

```
<h1> New User Registration Page</h1>
```

```
Enter User Name <input type="text" name="name" ><br>
```

```
Enter Password <input type="password" name="pass1" ><br>
```

```
Re-Enter Password<input type="password" name="pass2" ><br>
```

```
<input type="reset" ><input type="submit" value="REGISTER" >
```

```
<p>After Clicking on Register button,you will be redirected to Login Page as your details get registered.</p>
```

```
</form></body>
```

```
</html>
```

```
Reg.java
```

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

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

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

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

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

```

if(pass1.equals(pass2)){
try{

Connection con = DriverManager.getConnection("jdbc:derby://localhost:1527/sa","sa","sa");
PreparedStatement stmt = con.prepareStatement("update usepass set pass=? where username=?");
stmt.setString(1, pass1); stmt.setString(2, uname);
int row = stmt.executeUpdate();
if(row==1) { out.println("Password Changed");
response.sendRedirect("Login.jsp");}
else {
out.println("Password Not Changed");
response.sendRedirect("Register.jsp");}

}
catch(Exception e){out.println(e);}
}
else
{
out.println("<h1>Password Mismatch</h1>");
}
}

```

Login.jsp

```
<%@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>
```

```
<form action="log" method="post" >
```

```
Enter User Name <input type="text" name="name" ><br>
```

```
Enter Password <input type="password" name="pass" ><br>
<input type="reset" ><input type="submit" value="~~~LOGIN~~" >
To Update password:<a href="update.jsp" >Change Password</a>

</form></body>

</html>
```

Log.java

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

    PrintWriter out = response.getWriter();

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

    String pass1 = request.getParameter("pass1");
    String pass2 = request.getParameter("pass2");

    if(pass1.equals(pass2)){
    try{

        Connection con = DriverManager.getConnection("jdbc:derby://localhost:1527/sa","sa","sa");
        PreparedStatement stmt = con.prepareStatement("update usepass set pass=? where username=?");
        stmt.setString(1, pass1); stmt.setString(2, uname);

        int row = stmt.executeUpdate();

        if(row==1) { out.println("Password Changed");
        response.sendRedirect("Login.jsp");}

        else {
        out.println("Password Not Changed");
        response.sendRedirect("Register.jsp");}

    }catch(Exception e){out.println(e);}

    }

    else

    {

    out.println("<h1>Password Mismatch</h1>");

    }
```

Update.jsp

```
<%@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>

        <form action="up" >

            Enter User Name <input type="text" name="name" ><br>
Enter Password <input type="password" name="pass1" ><br>
Re-Enter Password<input type="password" name="pass2" ><br>
<input type="reset" ><input type="submit" value="REGISTER" >

        </form></body>

</html>
```

Up.java

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

    PrintWriter out = response.getWriter();

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

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

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

    if(pass1.equals(pass2)){

        try{

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

            PreparedStatement stmt = con.prepareStatement("update usepass set pass=? where username=?");

            stmt.setString(1, pass1); stmt.setString(2, uname);

            int row = stmt.executeUpdate();

            if(row==1) { out.println("Password Changed");
```



```

response.sendRedirect("Login.jsp");}

else {
out.println("Password Not Changed");
response.sendRedirect("Register.jsp");}

}catch(Exception e){out.println(e);}
}

else
{
out.println("<h1>Password Mismatch</h1>");
}

```

Pg no:2 Slip No:1

A)

Q) Develop simple Marks Entry Application to demonstrate accessing Database using EJB .

Jsp page:-

```
<%--
```

Document : marks

Created on : Sep 24, 2019, 4:44:28 PM

Author : PC10

```
--%>
```

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

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

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

```
<title>marks</title>
```

```
</head>

<body>

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

    NAME:<input type="text" name="n1"><br>

    ID:<input type="text" name="i1"><br>

    Subject 1:<input type="text" name="s1"><br><br>

    subject 2:<input type="text" name="s2"><br>

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

  </form>

</body>

</html>
```

Create package in ejb

Marks.java //bean servlet

```
package marks;

import static java.lang.System.out;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.SQLException;
import javax.ejb.Stateless;

@Stateless
public class marks implements marksLocal {

  @Override
  public String marks2(String a, String b, String c, String d) {

    try{

      String host="jdbc:derby://localhost:1527/tyit";
```

```

        Connection con=DriverManager.getConnection(host,"sa","sa");

        out.println("<h1>connected</h1>");

        String st="insert into MARKS values('"+a+"','"+b+"','"+c+"','"+d+"')";

        java.sql.Statement
stmt=con.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_UPDATABLE);

        int i;

        i = stmt.executeUpdate(st);

        out.println("<h1>record updated</h1>");

    }

    catch(SQLException k)

    {

        out.println("<h1>not connected" +k+ "</h1>");

    }

    return ("");

}

```

Mark.java //servlet page

```

package marks;

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 mark extends HttpServlet {

    @EJB

    private marksLocal marks;

    protected void processRequest(HttpServletRequest request, HttpServletResponse response)

        throws ServletException, IOException {

```

```

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

try (PrintWriter out = response.getWriter()) {

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

    out.println("<html>");

    out.println("<head>");

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

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

    out.println("<body>");

    String a=request.getParameter("n1");

    String b=request.getParameter("i1");

    String c=request.getParameter("s1");

    String d=request.getParameter("s2");

    out.println("Data is updated"+marks.marks2(a,b,c,d);

    out.println("<h1>Servlet mark at " + request.getContextPath() + "</h1>");

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

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

}

}

```

B)

Q) Write a simple JSP application to demonstrate the use of implicit object (at least 3 methods of 4 objects).

Index.jsp

```

<form action="welcome.jsp"><input type="text" name="uname"><br><input type="submit"
value="go"><br></form>

```

```

<% out.print("Today is:"+java.util.Calendar.getInstance().getTime()); %>

```

Welcome.jsp

```

<%

```

```

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

```

```
session.setAttribute("user",u);

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

out.print("Hello"+g);

%>
```

Pg No:2 Slip No:2

A)

Q) Create a JSP application to demonstrate the use of JSTL .

Jsp page

```
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>

<html>

<head>

<title>Core Tag Example</title>

</head>

<body>

<c:set var="income" scope="session" value="\${4000*4}"/>

<p>Your income is : <c:out value="\${income}"/></p>

<c:choose>

  <c:when test="\${income <= 1000}">

    Income is not good.

  </c:when>

  <c:when test="\${income > 10000}">

    Income is very good.

  </c:when>

  <c:otherwise>

    Income is undetermined...

  </c:otherwise>
```

```
</c:choose>
```

```
</body>
```

```
</html>
```

B)

Q) Develop simple application to demonstrate accessing Session Bean using EJB &

Jsp page:-

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

```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

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

```
    <title>currency converter</title>
```

```
  </head>
```

```
  <body>
```

```
    <form method="post" action="servlet1">
```

```
      Enter Amount in rupees:<input type="text" name="t1">
```

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

```
    </form>
```

```
  </body>
```

```
</html>
```

After that create an Ejb servlet .

package sb; //package name

```
import static java.lang.System.out;
```

```
import javax.ejb.Stateless;
```

```
@Stateless
```

```
public class curr implements currLocal {
```

```
    @Override
```

```

public Float currency(float a) {

    return (a*71);

}

// Add business logic below. (Right-click in editor and choose
// "Insert Code > Add Business Method")
}

```

Servlet1.java

```

package sb;

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 servlet1 extends HttpServlet {

    @EJB

    private currLocal curr;

    protected void processRequest(HttpServletRequest request, HttpServletResponse response)

        throws ServletException, IOException {

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

        try (PrintWriter out = response.getWriter()) {

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

            out.println("<html>");

            out.println("<head>");

            out.println("<title>Servlet servlet1</title>");

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

```

```

        out.println("<body>");

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

        out.print("<h1>Your amount in Doller will be" +curr.currency(a)+"</h1>");


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

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

    }

}

```

Pg No:3 Slip No:1

A)

Q) Create a Currency Converter application using EJB.
Refer the Pg No:2 Slip No:2 (B)

B)

Q) Write a JSP code to accept an employee id from user and delete the records of that employee. If the employee id does not exist, it should redirect to page with message “No such employee ID” else it should redirect to another page with the message “Employee record deleted successfully”.

Index.jsp

<%--

Document : index

Created on : 5 Oct, 2019, 1:58:45 AM

Author : TEJAS

--%>

<%@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>

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

        <input tye="text" name="n"><br>

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

    </form>

</body>

</html>
```

Delete.java

```
/*

* To change this license header, choose License Headers in Project
Properties.

* To change this template file, choose Tools | Templates

* and open the template in the editor.

*/

import java.io.IOException;

import java.io.PrintWriter;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;


import java.sql.SQLException;

import javax.servlet.ServletException;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;
```

```
import javax.servlet.http.HttpServletResponse;
```

```
/**
```

```
*
```

```
* @author TEJAS
```

```
*/
```

```
public class delete extends HttpServlet {
```

```
    /**
```

```
        * Processes requests for both HTTP GET and  
        POST
```

```
        * methods.
```

```
        *
```

```
        * @param request servlet request
```

```
        * @param response servlet response
```

```
        * @throws ServletException if a servlet-specific error occurs
```

```
        * @throws IOException if an I/O error occurs
```

```
        */
```

```
        protected void doPost(HttpServletRequest request, HttpServletResponse  
        response)
```

```
            throws ServletException, IOException {
```

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

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

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

```
            try{
```

```

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

PreparedStatement stmt = con.prepareStatement("delete from employee
where id=?");

stmt.setInt(1, a);

int rs = stmt.executeUpdate();

if(rs==1)
{
response.sendRedirect("deleted.html");
}
else
{
response.sendRedirect("notexist.html");
}
}

catch(SQLException e){out.println(e);}

}
}

```

Deleted.html

```
<!DOCTYPE html>
```

```
<!--
```

To change this license header, choose License Headers in Project Properties.

To change this template file, choose Tools | Templates

and open the template in the editor.

-->

<html>

<head>

<title>TODO supply a title</title>

<meta charset="UTF-8">

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

</head>

<body>

<h1>Employee Record Deleted</h1>

</body>

</html>

NotExist.html

<!DOCTYPE html>

<!--

To change this license header, choose License Headers in Project Properties.

To change this template file, choose Tools | Templates

and open the template in the editor.

-->

<html>

<head>

<title>TODO supply a title</title>

<meta charset="UTF-8">

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

</head>

<body>

<h1>Employee Record Does Not Exist</h1>

</body>

</html>

Pg No:3 Slip No:2

A)

Q) Develop simple EJB application to demonstrate Servlet Hit count using Singleton Session Beans.

create a new web project ->create a session bean -> give ejb name and package name

CountServletHitsBean.java // bean java page

```
package ejb;

import javax.ejb.Singleton;

@Singleton

public class CountServletHitsBean {

    private int hitcount;

    public synchronized int incrementAndGetHitCount(){

        return hitcount++;

    }

    // Add business logic below. (Right-click in editor and choose
    // "Insert Code > Add Business Method")

}
```

Create another package as servlet

cs.java //servlet page

```
package servlet;

import ejb.CountServletHitsBean;

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 servletclient extends HttpServlet {

    @EJB

    private CountServletHitsBean countServletHitsBean;

    protected void processRequest(HttpServletRequest request, HttpServletResponse
response)

        throws ServletException, IOException {

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

        try (PrintWriter out = response.getWriter()) {

            /* TODO output your page here. You may use following sample code. */

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

            out.println("<html>");

            out.println("<head>");

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

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

            out.println("<body>");

            out.println("<h1>Number of the times this servlet is
accessed:"+countServletHitsBean.incrementAndGetHitCount());

            out.println("<h1>Servlet servletclient at " + request.getContextPath() + "</h1>");

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

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

        }

    }
}

```

Index.html

<!DOCTYPE html>

<!--

To change this license header, choose License Headers in Project Properties.

To change this template file, choose Tools | Templates

and open the template in the editor.

-->

<html>

<head>

<title>TODO supply a title</title>

<meta charset="UTF-8">

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

</head>

<body>

<form action="cs">

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

</form>

</body>

</html>

B)

Q) Write a servlet code to store the biodata details of a user into the **database**. (Name, age, address, hobbies, gender, Qualification).

Index.html

<!DOCTYPE html>

<!--

To change this license header, choose License Headers in Project Properties.

To change this template file, choose Tools | Templates

and open the template in the editor.

-->

<html>

<head>

<title>TODO supply a title</title>

<meta charset="UTF-8">

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

</head>

<body>

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

Name:<input type="text" name="t1">

Age:<input type="text" name="t2">

Address:<input type="text" name="t3">

Hobbies:<input type="text" name="t4">

Qualification:<input type="text" name="t5">

Gender:<input type="text" name="t6">

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

</form>

</body>

</html>

Store.java

/*

* To change this license header, choose License Headers in Project Properties.

* To change this template file, choose Tools | Templates

*** and open the template in the editor.**

***/**

import java.io.IOException;

import java.io.PrintWriter;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.sql.SQLException;

import javax.servlet.ServletException;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

/**

*** @author TEJAS**

***/**

public class store extends HttpServlet {

/**

*** Processes requests for both HTTP `GET` and
`POST`**

*** methods.**

*** @param request servlet request**

*** @param response servlet response**

*** @throws ServletException if a servlet-specific error occurs**

*** @throws IOException if an I/O error occurs**

***/**

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

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

PrintWriter out = response.getWriter();

String a=request.getParameter("t1");

String b=request.getParameter("t2");

String c=request.getParameter("t3");

String d=request.getParameter("t4");

String e=request.getParameter("t5");

String f=request.getParameter("t6");

try{

Connection

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

PreparedStatement s=con.prepareStatement("insert into ex values(?,?,?,?,?,?)");

s.setString(1,a);

s.setString(2,b);

s.setString(3,c);

s.setString(4,d);

s.setString(5,e);

s.setString(6,f);

int r=s.executeUpdate();

```
        if(r==1)
        {
            out.print("Records Updated");

        }
        else
        {
            out.print("Records Updating Fail");
        }

    }catch(SQLException z)
    {
        out.println("Error:"+z);
    }
}
```

Pg No:4 Slip No:1

A)

Q) Write a Java Program using Servlet to authenticate user's username and password.

Refer to Pg No:1 Slip No:1 (A)

Pg no:4 Slip No:2

A)

Q) Create simple Servlet application to demonstrate Non -Blocking Read Operation.

Create three java servlet pages...and a txt file which supposed to be read...

NonBlockingServlet.java

```
import java.io.BufferedReader;
import java.io.BufferedWriter;
import java.io.IOException;
import java.io.InputStream;
import java.io.InputStreamReader;
import java.io.OutputStreamWriter;
import java.io.PrintWriter;
import java.net.HttpURLConnection;
import java.net.URL;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.servlet.ServletContext;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

@WebServlet(name = "NonBlockingServlet", urlPatterns = {"/NonBlockingServlet"})

public class NonBlockingServlet extends HttpServlet {

    @Override

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

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

        String filename = "/WEB-INF/non_block.txt";

        ServletContext context = getServletContext();

        InputStream inputStream = context.getResourceAsStream(filename);
```

```

try (PrintWriter out = response.getWriter()) {

    String path = "http://" + request.getServerName() + ":" + request.getServerPort() +
request.getContextPath() + "/ReadingNonBlockingServlet";

    out.println("<html>");

    out.println("<head>");

    out.println("<title>File Reader to demonstrate a Non Blocking I/O Servlet</title>");

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

    out.println("<body>");

    out.println("<h1>File Reader</h1>");

    out.flush();

    URL url = new URL(path);

    HttpURLConnection conn = (HttpURLConnection) url.openConnection();

    conn.setChunkedStreamingMode(2);

    conn.setDoOutput(true);

    conn.connect();

    if (inputStream != null) {

        InputStreamReader inputStreamReader = new InputStreamReader(inputStream);

        BufferedReader bufferedReader = new BufferedReader(inputStreamReader);

        String text = "";

        System.out.println("Reading started...");

        try (BufferedWriter bufferWriter = new BufferedWriter(new
OutputStreamWriter(conn.getOutputStream()))) {

            out.println("<div style='width=100%;height:450px;overflow:scroll;'>");

            while ((text = bufferedReader.readLine()) != null) {

                out.println("<div style='background-color:lavender;width=100%;'>");

                out.println(text);

                out.println("</div><br/>");

                out.flush();

                bufferWriter.write(text);

                Thread.sleep(1000);

                out.flush();

```

```

        }

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

        System.out.println("Reading completed...");

        bufferWriter.flush();

        bufferWriter.close();

    }

}

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

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

} catch (InterruptedException | IOException ex) {

    Logger.getLogger(NonBlockingServlet.class.getName()).log(Level.SEVERE, null, ex);

} }}

```

ReadingListener.java

```

import java.io.IOException;

import java.util.logging.Level;

import java.util.logging.Logger;

import javax.servlet.AsyncContext;

import javax.servlet.ReadListener;

import javax.servlet.ServletInputStream;

public class ReadingListener implements ReadListener {

    private ServletInputStream inputStream = null;

    private AsyncContext context = null;

    public ReadingListener (ServletInputStream in, AsyncContext ac) {

        this.inputStream = in;

        this.context = ac;

    }

    @Override

    public void onDataAvailable() {

        try {

```

```

        StringBuilder stringBuilder = new StringBuilder();

        int len = -1;

        byte bytes[] = new byte[1024];

        while (inputStream.isReady() && (len = inputStream.read(bytes)) != -1) {

            String data = new String(bytes, 0, len);

        }

    } catch (IOException ex) {

        Logger.getLogger(ReadingListener.class.getName()).log(Level.SEVERE, null, ex);

    }

}

```

```

@Override

public void onAllDataRead() {

    System.out.println("Invoked onAllDataRead()");

    context.complete();

}

```

```

@Override

public void onError(Throwable t) {

    context.complete();

}

}

```

ReadingNonBlockingServlet.java

```

import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.AsyncContext;

import javax.servlet.ServletException;

import javax.servlet.ServletInputStream;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

```

```

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

@WebServlet(name = "ReadingNonBlockingServlet", urlPatterns = {"/ReadingNonBlockingServlet"},
asyncSupported=true)

public class ReadingNonBlockingServlet extends HttpServlet {

    @Override

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

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

        try (PrintWriter out = response.getWriter()) {

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

            out.println("<html>");

            out.println("<head>");

            out.println("<title>File Reading Servlet Using Non Blocking I/O</title>");

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

            out.println("<body>");

            AsyncContext context = request.startAsync();

            ServletInputStream inputStream = request.getInputStream();

            inputStream.setReadListener(new ReadingListener(inputStream, context));

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

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

        }}}

```

B)

Q) Develop a JSP application to authenticate user login with database.

Register.jsp

<%--

Document : register

Created on : 5 Oct, 2019, 3:10:27 AM

Author : TEJAS

--%>


```

<%@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>

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

<h1> New User Registration Page</h1>

Enter User Name <input type="text" name="txtName" ><br>
Enter Password <input type="password" name="txtPass1" ><br>
Re-Enter Password<input type="password" name="txtPass2" ><br>
Enter Email<input type="text" name="txtEmail" ><br>
Enter Country Name <input type="text" name="txtCon" ><br>
<input type="reset" ><input type="submit" value="REGISTER" >

<p>After Clicking on Register button,you will be redirected to Login Page as your details get
registered.</p>

        </body>

    </html>

```

Reg.java

```

/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */

package reg;

import java.io.IOException;

```

```

import java.io.PrintWriter;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import javax.servlet.ServletException;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;


/**
 *
 * @author TEJAS
 */
public class reg extends HttpServlet {


    /**
     * Processes requests for both HTTP GET and POST
     * methods.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     */
    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("txtName");

        String pass1 = request.getParameter("txtPass1");

```

```

String pass2 = request.getParameter("txtPass2");
String email = request.getParameter("txtEmail");
String ctry = request.getParameter("txtCon");
if(pass1.equals(pass2)){
try{

Connection con = DriverManager.getConnection("jdbc:derby://localhost:1527/sa","sa","sa");
PreparedStatement stmt = con.prepareStatement("insert into table1 values (?, ?, ?, ?)");
stmt.setString(1, uname); stmt.setString(2, pass1);
stmt.setString(3, email); stmt.setString(4, ctry);
int row = stmt.executeUpdate();
if(row==1) { response.sendRedirect("login.jsp");}
else {
out.println("Registration FFFFFAAAIILLLL !!!!");}
}catch(Exception e){out.println(e);}
}
else
{
out.println("<h1>Password Mismatch</h1>");

}

}

```

```

}}

```

Login.jsp

```

<%--

```

Document : login

Created on : 5 Oct, 2019, 3:10:37 AM

Author : TEJAS

--%>

<%@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>

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

Enter User Name <input type="text" name="txtName" >

Enter Password <input type="password" name="txtPass" >

<input type="reset" ><input type="submit" value="~~~LOGIN~~" >

</form>

</body>

</html>

Log.java

/*

* To change this license header, choose License Headers in Project Properties.

* To change this template file, choose Tools | Templates

* and open the template in the editor.

*/

import java.io.IOException;

import java.io.PrintWriter;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import javax.servlet.ServletException;

```

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;


/**
 *
 * @author TEJAS
 */
public class log extends HttpServlet {


    /**
     * Processes requests for both HTTP GET and POST
     * methods.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     */
    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("txtName");
String pass = request.getParameter("txtPass");
try{

Connection con = DriverManager.getConnection("jdbc:derby://localhost:1527/sa","sa","sa");
PreparedStatement stmt = con.prepareStatement("select pass from table1 where uname=?");
stmt.setString(1, uname);

```

```

ResultSet rs = stmt.executeQuery();

if(rs.next()){
if(pass.equals(rs.getString(1)))
{
out.println("<h1>~~~ LOGIN SUCCESSFULL ~~~ </h1>");
}
}
else{
response.sendRedirect("register.jsp");

}

}
catch(Exception e)
{
out.println(e);
}
}}

```

Pg No:4 Slip No:3

B)

Q) Write a JSP code to accept a department id from user and display all the employee working in that department. Display the output in a tabular format.

Index.html

<!DOCTYPE html>

<!--

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and open the template in the editor.

-->

<html>

<head>

<title>TODO supply a title</title>

<meta charset="UTF-8">

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

</head>

<body>

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

<input type="text" name="t1">

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

</form>

</body>

</html>

Ept.java

/*

* To change this license header, choose License Headers in Project Properties.

* To change this template file, choose Tools | Templates

* and open the template in the editor.

*/

import java.io.IOException;

import java.io.PrintWriter;

import java.sql.Connection;

import java.sql.DriverManager;

```

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.SQLException;

import javax.servlet.ServletException;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;


/**
 *
 * @author TEJAS
 */
public class ept extends HttpServlet {

    /**
     * Processes requests for both HTTP GET and
     POST
     * methods.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     */
    protected void doPost(HttpServletRequest request, HttpServletResponse
response)

```



```

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

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

        Connection
con=DriverManager.getConnection("jdbc:derby://localhost:1527/sa","sa","s
a");

        PreparedStatement s=con.prepareStatement("select name from dept
where id=?");

        s.setInt(1, a);

        ResultSet rs=s.executeQuery();

        while(rs.next())
        {
            out.println(rs.getString(1));
        }

    }catch(SQLException e){out.print(e);}

}}

```

Page No:5 Slip No:2

B)

Q) Develop servlet application to store the details of a student (Name, age, address, gender, dob, hobbies) into the database

Refer to Pg No:3 Slip No:2 (b) Similar Steps

Page No:5 Slip No:3

A)Refer to Pg No:4 Slip No:2 (A)

B)

Q) Create a registration and login JSP application to register and authenticate the user based on username and password using JDBC.

Refer to Pg No:4 Slip No:2(b)

Pg No:6 Slip No:1

A) Refer to Pg No:4 Slip No:2(b)

B)

Q) Develop servlet application for accepting user registration details and displaying it on another page (At least 6 Values).

Index.jsp

Index.jsp

<%--

Document : newjsp

Created on : Aug 14, 2019, 1:31:12 PM

Author : PC28

--%>

<%@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>

    <form name="f1" method="post" action="s1">

        <h1>DETAILS</h1>

        Name: <input type="text" name="un"> <br><br>

        Age : <input type="number" name="age"> <br><br>

        Hobbies :

        <input type="checkbox" name ="1" value="Cricket"> Cricket

        <input type="checkbox" name ="2" value="Dancing"> Dancing

        <input type="checkbox" name ="3" value="Music"> Music

        <input type="checkbox" name ="4" value="Music"> Reading

        <br><br>

        Email Id : <input type="email" name="em"> <br><br>

        Gender :

        <input type="radio" name="r" value="Male">Male

        <input type="radio" name="r" value="Female">Female

        <input type="radio" name="r" value="Other">Other

        <br><br>

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

    </form>

</body>

</html>

S1.java
```

```

import java.io.IOException;

import java.io.PrintWriter;


import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@WebServlet(urlPatterns = {"/s1"})
public class s1 extends HttpServlet {

    protected void doPost(HttpServletRequest request, HttpServletResponse
response)

        throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        try (PrintWriter out = response.getWriter()) {
            /* TODO output your page here. You may use following sample code.
            */

            out.println("<!DOCTYPE html>");
            out.println("<html>");
            out.println("<head>");
            out.println("<title>Servlet s1</title>");
            out.println("</head>");
            out.println("<body>");


            String name=request.getParameter("un");
            String age=request.getParameter("age");

```

```
String[] s={"1","2","3","4"};
String[] a = new String[4];
for(int i=0;i<4;i++)
{
    a[i]=request.getParameter(s[i]);
}
String email=request.getParameter("em");
String gender=request.getParameter("r");

out.println("The name is : "+name);
out.println("<br>");
out.println("Age is : "+age);
out.println("<br>");
out.println("Hobbies is : ");
for(int i=0;i<4;i++)
{
    if(a[i]!=null)
    {
        out.println(a[i]+" , ");
    }
}
out.println("<br>");
out.println("Email Id is : "+email);
out.println("<br>");
out.print("Gender is : "+gender);
```

```

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

```

Pg No:6 Slip No:2

A)

Q) Create an html page with fields, eno, name, age, desg, salary. Now on submit this data to a JSP page which will update the employee table of database with matching eno.

Index.html

```
<!DOCTYPE html>
```

```
<!--
```

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To change this template file, choose Tools | Templates

and open the template in the editor.

```
-->
```

```
<html>
```

```
    <head>
```

```
        <title>TODO supply a title</title>
```

```
        <meta charset="UTF-8">
```

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

```
    </head>
```

```
    <body>
```

```
        <form action="s.jsp" method="post">
```

```
        Employee No:<input type="text" name="t1"><br>
```

```
Employee Name:<input type="text" name="t2"><br>
Age:<input type="text" name="t3"><br>
Desg:<input type="text" name="t4"><br>
Salary:<input type="text" name="t5"><br>
<input type="submit" value="update">
</form></body>
</html>
s.jsp
<%--
    Document   : s
    Created on : 5 Oct, 2019, 3:56:51 AM
    Author    : TEJAS
--%>

<%@page import="java.sql.SQLException"%>
<%@page import="java.sql.DriverManager"%>
<%@page import="java.sql.PreparedStatement"%>
<%@page import="java.sql.Connection"%>
<%@page import="java.sql.Connection"%>
<%@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>

<%

String s1=request.getParameter("t1");

String s2=request.getParameter("t2");

String s3=request.getParameter("t3");

String s4=request.getParameter("t4");

String s5=request.getParameter("t5");

try{

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

**PreparedStatement stmt = con.prepareStatement("update emp1 set
name=?,age=?,desg=?,salary=? where eno=? ");**

stmt.setString(1,s2); stmt.setString(2, s3);

stmt.setString(3,s4); stmt.setString(4, s5);

stmt.setString(5,s1);

int row = stmt.executeUpdate();

if(row==1) { out.println("Record Updated");}

else{out.println("Record Not Updated");}

}catch(SQLException f)

{

out.println(f);

}

%>

</body>

</html>

B)

Q) Develop simple application to demonstrate accessing Session Bean using EJB.

Refer to Pg No.3 Slip No.1 (a)

Pg No:7 Slip No:1

A)

Q) Create a servlet that uses Cookies to store the number of times a user has visited servlet.

Index.html

<html>

<head><title>Cookie Demo</title></head>

<body>

<form action="Page1" >

**Enter Your Name <input type="text" name="txtName">
**

<input type="submit" value="~~~ Click to Enter ~~~">

</form>

</body>

</html>

Page1.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 javax.servlet.http.Cookie;

public class Page1 extends HttpServlet {

    public void doGet(HttpServletRequest request, HttpServletResponse
    response)

    throws ServletException, IOException {

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

        PrintWriter out = response.getWriter();

        out.println("<html><head><title>Page1</title></head>");

        out.println("<body bgcolor=pink >");

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

        out.println("<h1>~~~ Welcome "+uname+"</h1>");

        Cookie ck1 = new Cookie("username", uname);

        Cookie ck2 = new Cookie("visit", "1");

        response.addCookie(ck1); response.addCookie(ck2);

        out.println("<h1><a href=Page2 >Click to visit Page 2 </a></h1>");

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

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

    }

}

```

Page 2.java

```

package mypack;

import java.io.*;

import javax.servlet.ServletException;

import javax.servlet.http.*;

public class Page2 extends HttpServlet {

```

```

    public void doGet(HttpServletRequest request, HttpServletResponse
response)
throws ServletException, IOException {
response.setContentType("text/html;charset=UTF-8");
PrintWriter out = response.getWriter();
out.println("<html><head><title>Page2</title></head>");
out.println("<body bgcolor=yellow >");
Cookie [] ck = request.getCookies();
for(int i=0;i<ck.length;i++){
if(ck[i].getName().equals("visit")){
int count = Integer.parseInt(ck[i].getValue()+1;
out.println("<h1>Visit No : "+count+"</h1>");
ck[i] = new Cookie("visit",count+"");
response.addCookie(ck[i]);
}
else {
out.println(ck[i].getName()+ " = "+ck[i].getValue()); }

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

```

B)

Q) Develop a JSP application to allow the user to modify the registration details after the valid authentication.

Refer to Page No:1 Slip No:2 (b)

Pg No:7 Slip No:2

A)

Q) Develop a Simple Room Reservation System Application Using EJB.

Jsp page

```
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
    <head>
        <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
        <title>Room Reservation System</title>
    </head>
    <center>
    <body>
        <h1>Room Reservation System</h1>
        <form action="rev" method="post">
            NAME:<input type="text" name="n1">
            MOBILE NO:<input type="text" name="m1"><br><br>
            ROOM TYPE:<input type="text" name="r1">
            NO OF ROOM:<input type="text" name="n"><br><br>
            CHECK IN :<input type="text" name="c1">
            CHECK OUT:<input type="text" name="c2"><br><br>
            <input type="submit" value="BOOK">
        </form>
    </body>
    </center>
</html>
```

EJB

```

package rev2;

import static java.lang.System.out;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.SQLException;

import javax.ejb.Stateless;

@Stateless

public class sb2 implements sb2Local {

    @Override

    public String book_method(String a, String b, String c, String d, String e, String f)

    {

        try{

            String host="jdbc:derby://localhost:1527/tyit";

            Connection con=DriverManager.getConnection(host,"sa","sa");

            out.println("<h1>connected</h1>");

            String st="insert into REV values('"+a+"','"+b+"','"+c+"','"+d+"','"+e+"','"+f+"')";

            java.sql.Statement

            stmt=con.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_UPDATABLE);

            int i;

            i = stmt.executeUpdate(st);

            out.println("<h1>record updated</h1>");

        }

        catch(SQLException k)

        {

            out.println("<h1>not connected" +k+ "</h1>");

        }

        return (" ");
    }

```

```
}
```

Servlet page

```
package rev2;

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 revs extends HttpServlet {

    @EJB

    private sb2Local sb2;

    protected void processRequest(HttpServletRequest request, HttpServletResponse response)

        throws ServletException, IOException {

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

        try (PrintWriter out = response.getWriter()) {

            /* TODO output your page here. You may use following sample code. */

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

            out.println("<html>");

            out.println("<head>");

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

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

            out.println("<body>");

            String a=request.getParameter("n1");

            String b=request.getParameter("m1");

            String c=request.getParameter("r1");

            String d=request.getParameter("n");
```

```

        String e=request.getParameter("c1");

        String f=request.getParameter("c2");

        out.println("Your room is booked"+sb2.book_method( a, b,c,d,e,f));

        out.println("<h1>Servlet revs at " + request.getContextPath() + "</h1>");

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

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

    }

}

```

Pg No:8 Slip No:2

A)

Q) Create a JSP page to demonstrate the use of Expression language.

Expression_lang.jsp

```

<html>

<head>

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

    <title>JSP Page</title>

</head>

<body bgcolor="orange">

<center>

    <h1>use of Expression language</h1><br>

    <form action="example.jsp" method="post"><br>

        Student name:<input type="text" name="n1"><br>

        Roll no.:<input type="text" name="r1"><br>

        <input type="submit" value="Student details!!">

    </center>

</form>

```

Example.jsp

```

    </body>
</html>
<html>
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    <title>JSP Page</title>
  </head>
  <body bgcolor="yellow"
    ><center>
      <h1>
        Student name is: ${ param.n1 } <br>
        Student Roll No is: ${ param.r1 }</h1>
      </center>
    </body>
</html>

```

Pg No.8 Slip No:3

A)

Refer to Page No:6 Slip No:2 (a)

B)

Q) Develop servlet application to demonstrate basic calculator.

Index.html

```

<html><head><title>Calculator App</title></head><body>
  <form action="CalculatorServlet" >
    Enter First Number <input type="text" name="txtN1" ><br>
    Enter Second Number <input type="text" name="txtN2" ><br>

```


Select an Operation

```
<input type="radio" name="opr" value="+">ADDITION  
<input type="radio" name="opr" value="-">SUBTRACTION  
<input type="radio" name="opr" value="*">MULTIPLY  
<input type="radio" name="opr" value="/">DIVIDE <br>  
<input type="reset">  
<input type="submit" value="Calculate" >  
</form></body></html>
```

CalculatorServlet.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 CalculatorServlet extends HttpServlet {  
  
    public void doGet(HttpServletRequest request, HttpServletResponse  
        response)  
  
        throws ServletException, IOException {  
  
        response.setContentType("text/html;charset=UTF-8");  
  
        PrintWriter out = response.getWriter();  
  
        out.println("<html><head><title>Servlet  
CalculatorServlet</title></head><body>");  
  
        double n1 = Double.parseDouble(request.getParameter("txtN1"));  
  
        double n2 = Double.parseDouble(request.getParameter("txtN2"));
```

```
double result =0;

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

if(opr.equals("+")) result=n1+n2; if(opr.equals("-")) result=n1-n2;

if(opr.equals("*")) result=n1*n2; if(opr.equals("/")) result=n1/n2;

out.println("<h1> Result = "+result); out.println("</body></html>");} } }
```

Pg No:9 Slip No:1

A)

Q) Using Request Dispatcher Interface create a Servlet which will validate the password entered by the user, if the user has entered "Servlet" as password, then he will be forwarded to Welcome Servlet else the user will stay on the index.html page and an error message will be displayed.

Index.html

```
<html><head><title>Login Form</title></head>

<form action="LoginServlet" >

Enter User ID<input type="text" name="txtId"><br>

Enter Password<input type="password" name="txtPass"><br>

<input type="reset">

<input type="submit" value=" Click to Login " >

</form>

</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;
```

```

import javax.servlet.RequestDispatcher;

public class LoginServlet extends HttpServlet {

    public void doGet(HttpServletRequest request, HttpServletResponse
response)

throws ServletException, IOException {

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

    PrintWriter out = response.getWriter();

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

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

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

    String upass = request.getParameter("txtPass");

    if(upass.equals("servlet")){

    RequestDispatcher rd = request.getRequestDispatcher("WelcomeServlet");

    rd.forward(request, response);

    }

    else{

    out.println("<body bgcolor=red >");

    out.println("<h1> Login Fail !!! </h1>");

    RequestDispatcher rd = request.getRequestDispatcher("index.html");

    rd.include(request, response);

    }

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

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

    }

}

```

WelcomeServlet.java

```
/*  
    * To change this license header, choose License Headers in Project  
    Properties.  
    * To change this template file, choose Tools | Templates  
    * and open the template in the editor.  
    */
```

```
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;
```

```
/**  
 *  
 * @author TEJAS  
 */  
public class WelcomeServlet extends HttpServlet {
```

```
    /**  
     * Processes requests for both HTTP GET and  
     POST  
     * methods.  
     *
```

```

* @param request servlet request
* @param response servlet response
* @throws ServletException if a servlet-specific error occurs
* @throws IOException if an I/O error occurs
*/

protected void processRequest(HttpServletRequest request,
HttpServletResponse response)
    throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
        /* TODO output your page here. You may use following sample code.
*/

        out.println("<!DOCTYPE html>");
        out.println("<html>");
        out.println("<head>");
        out.println("<title>Servlet WelcomeServlet</title>");
        out.println("</head>");
        out.println("<body>");

        String uname = request.getParameter("txtId");
        out.println("<h1> Welcome"+ uname + "</h1>");
        out.println("</body>");
        out.println("</html>");

    }
}

// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click
on the + sign on the left to edit the code.">

```

```

/**
 * Handles the HTTP <code>GET</code> method.
 *
 * @param request servlet request
 * @param response servlet response
 * @throws ServletException if a servlet-specific error occurs
 * @throws IOException if an I/O error occurs
 */
@Override
protected void doGet(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}

```

```

/**
 * Handles the HTTP <code>POST</code> method.
 *
 * @param request servlet request
 * @param response servlet response
 * @throws ServletException if a servlet-specific error occurs
 * @throws IOException if an I/O error occurs
 */
@Override
protected void doPost(HttpServletRequest request, HttpServletResponse
response)

```

```

        throws ServletException, IOException {
    processRequest(request, response);
}

/**
 * Returns a short description of the servlet.
 *
 * @return a String containing servlet description
 */
@Override
public String getServletInfo() {
    return "Short description";
} // </editor-fold>

}

```

B) Refer to Page No:8 Slip No:2 (a)

Pg No:10 Slip No:1

A) Refer to Page No:6 Slip No:1 (a)

B) Refer to Page No:6 Slip No:1(b)

Pg No:10 Slip No:2

A) Refer to Page No:2 Slip No:1 (a)

B) Refer to Page No:8 Slip No:3(b)

Pg No:10 Slip No:3

A) Refer to Page No:7 Slip No:2 (a)

B) Refer to Page No:6 Slip No:1(b)

Pg No:11 Slip No:1

A)

Q) Create a servlet demonstrating the use of session creation and destruction. Also check whether the user has visited this page first time or has visited earlier also using sessions.

Index.html

```
<html>

<head><title>Session Demo</title></head>

<form action="Page1" method="get" >

Enter User ID <input type="text" name="txtName"><br>

<input type="reset" ><input type="submit" >

</form>

</html>
```

Page1.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 javax.servlet.http.HttpSession;

public class Page1 extends HttpServlet {

    public void doGet(HttpServletRequest request, HttpServletResponse response)

        throws ServletException, IOException {
```

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

PrintWriter out = response.getWriter();

out.println("<html><head><title>Servlet Page1</title></head>");

HttpSession hs = request.getSession(true);

if(hs.isNew()){

    out.println("<body bgcolor=yellow>");

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

    hs.setAttribute("uname", name);

    hs.setAttribute("visit", "1");

    out.println("<h1>Welcome First Time</h1>");

}

else{

    out.println("<h1>Welcome Again</h1>");

    int visit = Integer.parseInt((String)hs.getAttribute("visit"))+1;

    out.println("<h1>You Visited "+visit+"Times</h1>");

    hs.setAttribute("visit", ""+visit);

}

out.println("<h1>Your Session ID "+hs.getId()+"</h1>");

out.println("<h1>You Logged in at "+new
java.util.Date(hs.getCreationTime())+"</h1>");

out.println("<h1><a href=LogoutServlet>Click to Terminate Session
</a></h1>");

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

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

```
}
```

```
}
```

LogoutServlet.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 LogoutServlet extends HttpServlet {
```

```
    public void doGet(HttpServletRequest request, HttpServletResponse response)
```

```
        throws ServletException, IOException {
```

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

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

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

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

```
        javax.servlet.http.HttpSession hs = request.getSession();
```

```
        if(hs != null) hs.invalidate();
```

```
        out.println("<h1>You are Logged out now.....</h1>");
```

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

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

```
}
```

}

B)

Q - Develop a JSP application to authenticate user login with database:

Refer to Pg No:4 Slip No:2 (B) of EJ solutions 1-10 pages

Pg No:11 Slip No:2

A)

Q) Develop a web application using Java Servlets, to provide a set of question [5 Questions minimum] to the user. Each question should have four options, from which the user should be able to selection only one. When the user clicks on button “Done”, call a servlet to compute and display the score of the user [number of correct and incorrect answers.]

Index.html

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>TODO supply a title</title>
```

```
<meta charset="UTF-8">
```

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

```
</head>
```

```
<body>
```

```
<form method="post" action="ANS">
```

```
Q.1 ) What is formula of Velocity ? <br>
```

```
<input type="radio" name="1" value="m*v">M*V
```

```
<input type="radio" name="1" value="m*v*v">M*V*V
```

☐

☐

Q.2) Who is PM of India ?

☐

☐

☐

☐

Q.3) What is Capital of India?

☐

☐

☐

☐

Q.4) Who is Known as JAWLINE ?

☐

☐

☐

☐

Q.5) Who created LINUX OS ?

☐

```
<input type="radio" name="5" value="LINUS">LINUS
<input type="radio" name="5" value="DENNIS RICHESS">DENNIS RICHESS
<input type="radio" name="5" value="BALLI">BALLI <br><br>
    <input type="submit" value="Done">
</form>
</body>
</html>
```

ANS.java

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
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;

/**
 *
 * @author TEJAS
 */
public class ANS extends HttpServlet {

    /**
```

* Processes requests for both HTTP `GET` and `POST`

* methods.

*

* @param request servlet request

* @param response servlet response

* @throws ServletException if a servlet-specific error occurs

* @throws IOException if an I/O error occurs

*/

protected void processRequest(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

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

try (PrintWriter out = response.getWriter()) {

String a[]=new String[5];

a[0]=request.getParameter("1");

a[1]=request.getParameter("2");

a[2]=request.getParameter("3");

a[3]=request.getParameter("4");

a[4]=request.getParameter("5");

String[] z= {"0.5*m*v*v", "Narendra Modi", "Delhi", "Prasant", "LINUS"};

int result=0;

for(int i=0;i<5;i++)

{

if (a[i]!=null && a[i].equals(z[i]))

{

result=result+1;

```

    }

    }

    out.println("<h1>DEAR USER YOUR RESULT IS :-<br> Correct ans "+result+"<br>
Incorrect ans"+(5-result)+"</h1>");

    }}}

```

B)

Q) Create a JSP page to demonstrate the use of Expression language

Refer to Pg No:9 Slip No:1 (B) of EJ solutions 1-10 pages

Pg No.12 Slip No:1

A)

Q) Develop a web application to allow the user to enter two numbers and select an operation [+, -, *, /] in an HTML file. When the user clicks “Calculate” button, call a servlet to compute the answer and display it to the user

Refer to Pg No:10 Slip No:2 (B) of EJ solutions 1-10 pages

B)

Q) Create a JSP application to demonstrate the use of JSTL

Refer to Pg No:2 Slip No:2 (A) of EJ solutions 1-10 pages

Pg No:12 Slip No:2

A)

Q) Develop a web application using JSP to allow the user to login by entering the user id and the password, when the user clicks on “Login” button, call a JSP page to authenticate the login, if successful take the user to “welcome.html”, otherwise display “Login Failed”, and allow the user to re-login. [Login(userid: varchar, password:varchar)]

12-2-login.jsp

```
<%@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>

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

            Enter your username :-<input type="text" name="username">

            Enter your password :-<input type="text" name="password">

            <input type="submit">

        </form>

    </body>

</html>
```

Login_servlet.java

```
/*
```

* To change this license header, choose License Headers in Project Properties.

* To change this template file, choose Tools | Templates

* and open the template in the editor.

*/

```
import java.io.IOException;
```

```
import java.io.PrintWriter;
```

```
import java.sql.Connection;
```

```
import java.sql.DriverManager;
```

```
import java.sql.ResultSet;
```

```
import java.sql.SQLException;
```

```
import javax.servlet.ServletException;
```

```
import javax.servlet.http.HttpServlet;
```

```
import javax.servlet.http.HttpServletRequest;
```

```
import javax.servlet.http.HttpServletResponse;
```

```
/**
```

```
 *
```

```
 * @author TEJAS
```

```
 */
```

```
public class login_servlet extends HttpServlet {
```

```
    /**
```

```
     * Processes requests for both HTTP GET and POST
```

```
     * methods.
```

```
     *
```

```
     * @param request servlet request
```

```
     * @param response servlet response
```

```
     * @throws ServletException if a servlet-specific error occurs
```

```

* @throws IOException if an I/O error occurs
*/
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("username");

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

        out.println(username);

        String s="select password from login where username='"+username+"'";
        try{
            Connection con=DriverManager.getConnection("jdbc:derby://localhost:1527/sa","sa","sa");

            java.sql.Statement st
=con.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_UPDATABLE);

            ResultSet result=st.executeQuery(s);

            if(!(result.next())){ /* if result.next() is false that means there is no result because of there is
no input username in database*/

                out.print("<script>alert('username not found')</script>"); /* just using java script to
generate alert with some msg */

                out.print("<script>javascript:history.go(-1);</script>"); /*this javascript is redirect you to
your previus visited page( -1 must be present) */

            }

            else

            {

```

```

        if(password.equals(result.getString(1)))
        {

            response.sendRedirect("welcome.html");

        }
        else{

            out.print("<script>alert('Wrong password')</script>");

            out.print("<script>javascript:history.go(-1);</script>");

        }

    }

}

}

catch(SQLException k)

{

    out.println(k);

}

}

}

```

// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to edit the code.">

```

/**

 * Handles the HTTP <code>GET</code> method.

 *

 * @param request servlet request

 * @param response servlet response

```

* @throws ServletException if a servlet-specific error occurs

* @throws IOException if an I/O error occurs

*/

@Override

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

processRequest(request, response);

}

/**

* Handles the HTTP <code>POST</code> method.

*

* @param request servlet request

* @param response servlet response

* @throws ServletException if a servlet-specific error occurs

* @throws IOException if an I/O error occurs

*/

@Override

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

processRequest(request, response);

}

/**

* Returns a short description of the servlet.

*

* @return a String containing servlet description

```

    */

    @Override

    public String getServletInfo() {

        return "Short description";

    } // </editor-fold>

}

Welcome.html

```

WEL<!DOCTYPE html>

<html>

<head>

<title>TODO supply a title</title>

<meta charset="UTF-8">

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

</head>

<body>

<h1>WELCOME</h1>

</body>

</html>COME

B)

Q:- Create a Currency Converter application using EJB.

Refer to Pg No:3 Slip No:1 (A) of EJ solutions 1-10 pages

Pg No:13 Slip No:1

A)

Q) Develop a web application using JSP to allow the user to register via an HTML page. When the user clicks on button "Register" call a JSP page to add the entered details to the database using JDBC API.

[Registration(fname:vchar, lname:vchar, email:vchar, userid: vchar, password:vchar)]

Index.html

```
<!DOCTYPE html>
```

```
<head>
```

```
    <title>TODO supply a title</title>
```

```
    <meta charset="UTF-8">
```

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

```
</head>
```

```
<body>
```

```
    <form action="store.jsp" method="post">
```

```
    Enter your name:-<input type="text" name="fname"><br>
```

```
    Enter your last_name:-<input type="text" name="lname"><br>
```

```
    Enter your email :-<input type="text" name="email"><br>
```

```
    Enter your username:-<input type="text" name="username"><br>
```

```
    Enter your paassword:-<input type="password" name="password"><br>
```

```
    <input type="submit">
```

```
</form>
```

```
</body>
```

</html>

store.jsp

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

```
<!DOCTYPE html>
```

```
<html>
```

```
    <%@page import="java.sql.Connection"%>
```

```
    <%@page import="java.sql.Statement"%>
```

```
    <%@page import="java.sql.ResultSet"%>
```

```
    <%@page import="java.sql.DriverManager"%>
```

```
    <%@page import="java.sql.SQLException" %>
```

```
    <%
```

```
        String a=request.getParameter("fname");
```

```
        String b=request.getParameter("lname");
```

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

```
        String d=request.getParameter("username");
```

```
        String e=request.getParameter("password");
```

```
        String s="insert into userdata  
values('"+a+"','"+b+"','"+c+"','"+d+"','"+e+"')";
```

```
        try{
```

```
            Connection co=DriverManager.getConnection("jdbc:derby://localhost:1527/login","r","r");
```

```
            Statement
```

```
st=co.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_UPDATABLE);
```

```
            st.executeUpdate(s);
```

```
            out.println("DATA STORE SUCCESSFULLY");
```



```

    }

    catch(SQLException k){

        out.println(k.toString());

    }

    %>

</html>

```

B)

Q) Create a servlet for a login page. If the username and password are correct then it says message “Hello <username>” else a message “login failed”

Refer to Pg No:1 Slip No:1 (A) of EJ solutions 1-10 pages

Pg No:13 Slip No:2

A)

Q) Develop a web application to allow the user to enter inventory details [Product name, Product Price and Quantity]. When the user clicks on button “Store”, call a bean to add the inventory details into the database using JDBC API. Display the appropriate message.

Index.html

```
<!DOCTYPE html>
```

```
<!--
```

To change this license header, choose License Headers in Project Properties.

To change this template file, choose Tools | Templates

and open the template in the editor.

```
-->
```

```
<html>
```

```
    <head>
```

```
<title>TODO supply a title</title>

<meta charset="UTF-8">

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

</head>

<body>

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

        Product Name:-<input type="text" name="fname"><br>

        Product Price:-<input type="text" name="lname"><br>

        Quantity :-<input type="text" name="email"><br>


        <input type="submit">

    </form>

</body>

</html>
```

Sd.java

```
/*

* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
*/

package sd;


import java.sql.Connection;
```

```
import java.sql.DriverManager;
```

```
import java.sql.ResultSet;
```

```
import java.sql.SQLException;
```

```
import java.sql.Statement;
```

```
import javax.ejb.Stateless;
```

```
import javax.ejb.LocalBean;
```

```
/**
```

```
 *
```

```
 * @author TEJAS
```

```
 */
```

```
@Stateless
```

```
@LocalBean
```

```
public class sd {
```

```
    public String storing(String a, String b, String c) throws SQLException {
```

```
        String s="insert into product  
values("+a+" "+b+" "+c+"");
```

```
        try{
```

```
            Connection
```

```
co=DriverManager.getConnection("jdbc:derby://localhost:1527/sa","sa","sa");
```

```
            Statement
```

```
st=co.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCU  
R_UPDATABLE);
```

```
        st.executeUpdate(s);
```

```
return "DATA STORE SUCCESSFULLY";
```

```
}catch(SQLException e)
```

```
{
```

```
    return "Error in adding details";
```

```
}
```

```
// Add business logic below. (Right-click in editor and choose
```

```
// "Insert Code > Add Business Method")
```

```
}
```

```
}
```

Store.java

```
/*
```

```
* To change this license header, choose License Headers in Project Properties.
```

```
* To change this template file, choose Tools | Templates
```

```
* and open the template in the editor.
```

```
*/
```

```
package sd;
```

```
import java.io.IOException;
```

```
import java.io.PrintWriter;
```

```
import java.sql.SQLException;
```

```
import java.util.logging.Level;

import java.util.logging.Logger;

import javax.ejb.EJB;

import javax.servlet.ServletException;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;
```

```
/**
```

```
*
```

```
* @author TEJAS
```

```
*/
```

```
public class store extends HttpServlet {
```

```
    @EJB
```

```
    private sd sd;
```

```
/**
```

```
    * Processes requests for both HTTP GET and  
    POST
```

```
    * methods.
```

```
*
```

```
* @param request servlet request
```

```
* @param response servlet response
```

```
* @throws ServletException if a servlet-specific error occurs
```

* @throws IOException if an I/O error occurs

*/

@Override

protected void doPost(HttpServletRequest request, HttpServletResponse
response)

throws ServletException, IOException{

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

try (PrintWriter out = response.getWriter()) {

String a=request.getParameter("fname");

String b=request.getParameter("lname");

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

out.println(sd.storing(a, b, c));

} catch (SQLException ex) {

Logger.getLogger(store.class.getName()).log(Level.SEVERE, null, ex);

}

}

}

B)

Q) Develop a simple JSP application to pass values from one page to another with validations. (Name-txt, age-txt, hobbies-checkbox, email-txt, gender-radio button).

Index.jsp

```
<%@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>


        <form action="page2.jsp">

            Name:-<input type="text" name="name"><br>

            Age:-<input type="text" name="age"><br>

            Hobbie:-

                <input type="checkbox" name="hob1" value="python">Python <input
type="checkbox" name="hob1" value="Java">Java<br>


            email:-<input type="text" name="email">

            Gender:-<input type="radio" name="gen" value="Male">Male <input
type="radio" name="gen" value="Female">Female<br>
```

```
<input type="submit" value="CHECK AND SEND" name="send">

</form>

</body>

</html>

Page2.jsp

<%--

    Document   : page2

    Created on : 6 Oct, 2019, 12:09:37 AM

    Author    : TEJAS

--%>

<%@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>

        <%

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

            String b=request.getParameter("age");
```



```
String c=request.getParameter("hob1");  
String d=request.getParameter("email");  
String e=request.getParameter("gen");  
out.println("Name:"+a);  
out.println("Age:"+b);  
out.println("Hobbies:"+c);  
out.println("Email:"+d);  
out.println("Gender:"+e);
```

```
%>
```

```
</body>
```

```
</html>
```

Pg No:14 Slip No:1

A)

Q) Use RequestDispatcher in the following example. Design a form to accept username and password from user. If password is equal to 'admin' then the control should go to Welcome Servlet which displays 'Hello' with the username entered. If password is not equal to 'admin' then control should go to Error Servlet which displays 'Error in Login'.

index.html

```
<html>
```

```
<head>
```

```
<title>TODO supply a title</title>

<meta charset="UTF-8">

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

</head>

<body>

    <form action="LoginServlet" >

Enter User ID<input type="text" name="txtId"><br>

Enter Password<input type="password" name="txtPass"><br>

<input type="reset">

<input type="submit" value=" Click to Login " >

</form>

</body>

</html>
```

LoginServlet.java

```
/*

 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */

import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.RequestDispatcher;

import javax.servlet.ServletException;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;
```

```

/**
 *
 * @author TEJAS
 */

public class LoginServlet extends HttpServlet {

    /**
     * Processes requests for both HTTP <code>GET</code> and <code>POST</code>
     * methods.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     */

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

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

        try (PrintWriter out = response.getWriter()) {

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

            String upass = request.getParameter("txtPass");

            if(upass.equals("admin")){

                RequestDispatcher rd = request.getRequestDispatcher("WelcomeServlet");

                rd.forward(request, response);

            }

            else{

                out.println("<body bgcolor=red >");
            }
        }
    }
}

```

```
out.println("<h1> Login Fail !!! </h1>");

RequestDispatcher rd = request.getRequestDispatcher("ErrorServlet");

rd.include(request, response);

}

}

}}
```

WelcomeServlet.java

```
/*

* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
*/

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;

/**

*

* @author TEJAS

*/

public class WelcomeServlet extends HttpServlet {
```

```

/**
 * Processes requests for both HTTP GET and POST
 * methods.
 *
 * @param request servlet request
 * @param response servlet response
 * @throws ServletException if a servlet-specific error occurs
 * @throws IOException if an I/O error occurs
 */
protected void processRequest(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
        String uname = request.getParameter("txtId");
        out.println("<h1> Welcome"+ uname + "</h1>");
    }
}
}

```

ErrorServlet.java

```

/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
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;


/**
 *
 * @author TEJAS
 */
public class ErrorServlet extends HttpServlet {

    /**
     * Processes requests for both HTTP <code>GET</code> and <code>POST</code>
     * methods.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     */
    protected void processRequest(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");

        try (PrintWriter out = response.getWriter()) {
            out.println("Error in Login");
        }
    }
}

```

}

B)

Q) Develop a Simple Room Reservation System Application Using EJB.

Refer to Pg No:10 Slip No:3 (A) of EJ solutions 1-10 pages

Pg No:14 Slip No:2

A)

1. Create a simple calculator application using servlet.

Refer to Pg No:1 2Slip No:1 (A) of EJ solutions 1-10 pages

B)

Q) Write a JSP to accept eno, ename and salary. Insert these records in emp.
(Create the emp table with these three fields)

emp.jsp

```
<%@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>
```

```
<form method="post" action="store">
```

```
Enter emp_no:-<input type="number" name="no"><br>
```

```
Enter emp_name:-<input type="text" name="name"><br>
```

```
Enter emp_salary:-<input type="text" name="salary"><br>
<input type="submit">
</form>
</body>
</html>
```

store.java (servlet)

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
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.ResultSet;
import java.sql.Connection;
import java.sql.SQLException;
import java.sql.DriverManager;
import java.sql.Statement;

/**
 *
 * @author user
 */
```



```

public class store extends HttpServlet {

    /**
     * Processes requests for both HTTP <code>GET</code> and <code>POST</code>
     * methods.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     */
    protected void processRequest(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        try (PrintWriter out = response.getWriter()) {
            /* TODO output your page here. You may use following sample code. */
            int a=Integer.parseInt(request.getParameter("no"));
            String b=request.getParameter("name");
            int c=Integer.parseInt(request.getParameter("salary"));
            String d="insert into emp values("+a+", "+"+b+"+", "+"+c+")";
            try{
                Connection
con=DriverManager.getConnection("jdbc:derby://localhost:1527/ravi","ravi","ravi");

                Statement
st=con.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_UPDATABLE);

                st.executeUpdate(d);

                out.println("DATA ADDED SUCCESSFULLY");
            }

```

```

        catch(SQLException k){

            out.println(k);

        }

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

        out.println("<html>");

        out.println("<head>");

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

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

        out.println("<body>");

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

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

    }

}

```

// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to edit the code.">

```

/**
 * Handles the HTTP <code>GET</code> method.
 *
 * @param request servlet request
 * @param response servlet response
 * @throws ServletException if a servlet-specific error occurs
 * @throws IOException if an I/O error occurs
 */
@Override
protected void doGet(HttpServletRequest request, HttpServletResponse response)

    throws ServletException, IOException {

```

```

        processRequest(request, response);
    }

    /**
     * Handles the HTTP <code>POST</code> method.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     */
    @Override
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        processRequest(request, response);
    }

    /**
     * Returns a short description of the servlet.
     *
     * @return a String containing servlet description
     */
    @Override
    public String getServletInfo() {
        return "Short description";
    }
} // </editor-fold>

```

```
}
```

Pg 15-1-1

Q) Write a JSP that takes login details from the user and forward the request to 'login.jsp' for 'Successful login' message if username and password is equal to admin otherwise display an error message 'Access Denied'.

Index.jsp

```
<%--
```

Document : index

Created on : 6 Oct, 2019, 1:47:09 AM

Author : TEJAS

```
--%>
```

```
<%@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>
```

```
<form action="login" >
```

Enter User ID

Enter Password


```
<input type="reset">

<input type="submit" value=" Click to Login " >

</form>

    </body>

</html>
```

Login.java

```
/*

 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.RequestDispatcher;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 *
 * @author TEJAS
 */
```

```

public class login extends HttpServlet {

    /**
     * Processes requests for both HTTP GET and
     * POST
     *
     * methods.
     *
     * @param request servlet request
     * @param response servlet response
     * @throws ServletException if a servlet-specific error occurs
     * @throws IOException if an I/O error occurs
     */
    protected void processRequest(HttpServletRequest request,
        HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        try (PrintWriter out = response.getWriter()) {
            String uname = request.getParameter("txtId");
            String upass = request.getParameter("txtPass");
            if((upass.equals("admin")&&(uname.equals("admin")))){
                RequestDispatcher rd = request.getRequestDispatcher("log.jsp");
                rd.forward(request, response);
            }
            else{

```

```
out.println("<body bgcolor=red >");
```

```
out.println("<h1> Error!!! </h1>");
```

```
}
```

```
}
```

```
}
```

```
// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on  
the + sign on the left to edit the code.">
```

```
/**
```

```
 * Handles the HTTP <code>GET</code> method.
```

```
 *
```

```
 * @param request servlet request
```

```
 * @param response servlet response
```

```
 * @throws ServletException if a servlet-specific error occurs
```

```
 * @throws IOException if an I/O error occurs
```

```
 */
```

```
@Override
```

```
protected void doGet(HttpServletRequest request, HttpServletResponse  
response)
```

```
    throws ServletException, IOException {
```

```
    processRequest(request, response);
```

```
}
```

```

/**
 * Handles the HTTP <code>POST</code> method.
 *
 * @param request servlet request
 * @param response servlet response
 * @throws ServletException if a servlet-specific error occurs
 * @throws IOException if an I/O error occurs
 */
@Override
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}

```

```

/**
 * Returns a short description of the servlet.
 *
 * @return a String containing servlet description
 */

```

```

@Override
public String getServletInfo() {
    return "Short description";
}

```

```

}

```



```
}
```

Log.jsp

```
<%--
```

Document : login

Created on : 6 Oct, 2019, 1:50:23 AM

Author : TEJAS

```
--%>
```

```
<%@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>Successful Login</h1>
```

```
</body>
```

```
</html>
```

B)

Q) Write EJB that calculates simple interest and compound interest for principal, number of years and rate of interest.

index.html

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>TODO supply a title</title>
```

```
<meta charset="UTF-8">
```

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

```
</head>
```

```
<body>
```

```
<form method="get" action="servlet">
```

```
Enter Principal<input type="number" name="principal" required="required"><br>
```

```
Enter Number of years<input type="number" name="time" required="required"><br>
```

```
Enter Rate of Interest<input type="number" name="rate" required="required"><br>
```

```
Enter number of times interest is compounded in a year<input type="number" name="n"
required="required"><br>
```

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

```
</form>
```

```
</body>
```

```
</html>
```

servlet.java

```
package com.interest;
```

```
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 servlet extends HttpServlet {

    @EJB

    private calculate calculate;


    protected void processRequest(HttpServletRequest request, HttpServletResponse response)

        throws ServletException, IOException {

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

        try (PrintWriter out = response.getWriter()) {

            /* TODO output your page here. You may use following sample code. */

            float p= (float)Integer.parseInt(request.getParameter("principal"));

            float r=(float)(Integer.parseInt(request.getParameter("rate")));

            float t=(float)Integer.parseInt(request.getParameter("time"));

            float n= (float)Integer.parseInt(request.getParameter("n"));


            out.println("SIMPLE INTEREST IS "+ calculate.simple(p, r, t));

            out.println("COMPOUND INTEREST IS "+ calculate.component(p, r, t, n));

        }

```

```
}
```

```
@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";
```

```
}
```

```
}
```

calculate.java

```
/*
```

```
* To change this license header, choose License Headers in Project Properties.
```

```
* To change this template file, choose Tools | Templates
```

```
* and open the template in the editor.
```

```
*/
```

```
package com.interest;
```

```

import javax.ejb.Stateless;

import javax.ejb.LocalBean;

/**
 *
 * @author user
 */
@Stateless
@LocalBean
public class calculate {

    public float simple(float p,float r,float t){

        float f=(float)(p*r*t)/100;

        return f;

    }

    public float component(float p,float r,float t,float n){

        float f=(float) Math.pow((p*(1+(r/n))), (n*t));

        return f;

    }

}

```

Pg No:15 Slip No:2

A)

Q) Develop simple EJB application to demonstrate Servlet Hit count using Singleton Session Beans.

Refer to Pg No:3Slip No2 (A) of EJ solutions 1-10 pages

B)

Q) Develop servlet application of basic calculator

Refer to Pg No:12 Slip No:1 (A) of EJ solutions 1-10 pages

Pg NO:15 Slip No:3

Q) Develop Simple Servlet Question Answer Application using Database.

Index.html

```
<html><head><title>Quiz Application</title></head>
```

```
<body>
```

```
<h1>Welcome to Quiz Servlet </h1>
```

```
<h1><a href="QuizServlet" >CLICK TO START QUIZ</a></h1>
```

```
</body>
```

```
</html>
```

QuizServlet.java

```
package mypack;
```

```
import java.io.*;
```

```
import java.sql.*;
```

```
import javax.servlet.*;
```

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

```
public class QuizServlet extends HttpServlet {
```

```
public void doGet(HttpServletRequest request, HttpServletResponse response)
```

```
throws ServletException, IOException {
```

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

PrintWriter out = response.getWriter();

out.println("<form action=ShowResult >");

try {

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

    Statement stmt = con.createStatement();

    ResultSet res = stmt.executeQuery("select * from quiz");

    out.println("<table border=1 >");

    int qno=0;

    while(res.next()){

        qno++;

        out.println("<tr><td>" + res.getString(1) + "</td>");

        out.println("<td>" + res.getString(2) + "</td></tr>");

        out.println("<tr><td><input type=radio name="+qno+"
        value="+res.getString(3)+"></td><td>" + res.getString(3) + "</td></tr>");

        out.println("<tr><td><input type=radio name="+qno+"
        value="+res.getString(4)+"></td><td>" + res.getString(4) + "</td></tr>");

        out.println("<tr><td><input type=radio name="+qno+"
        value="+res.getString(5)+"></td><td>" + res.getString(5) + "</td></tr>");

        out.println("<tr><td><input type=radio name="+qno+"
        value="+res.getString(6)+"></td><td>" + res.getString(6) + "</td></tr>");

    }

} catch (Exception e) {out.println(e);}

out.println("</table>");
```

```
out.println("<input type=reset >");  
  
out.println("<input type=submit value=SUBMIT >");  
  
out.println("</form>"); } }
```

ShowResult.java

```
package mypack;

import java.io.*;

import java.sql.*;

import javax.servlet.*;

import javax.servlet.http.*;

public class ShowResult extends HttpServlet {

    public void doGet(HttpServletRequest request, HttpServletResponse response)

        throws ServletException, IOException {

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

        PrintWriter out = response.getWriter();

        try {

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

            Statement stmt = con.createStatement();

            ResultSet res = stmt.executeQuery("select ans from quiz");

            int count =0, qno=0;

            while(res.next()){

                if(res.getString(1).equals(request.getParameter(">"+(++qno))))

                { count++;

                    out.println("<h1>Correct </h1>");

                }

                else {
```



```
out.println("<h1>Incorrect </h1>");  
  
}  
  
}  
  
out.println("<h1>Your Score is "+count+" </h1>");  
  
}catch(Exception e){out.println(e);}}
```

Pg No:16 Slip No:1

A)

Q) Develop a Simple Room Reservation System Application Using EJB.

Refer to Pg No:14 Slip No:2 (B) of EJ solutions 1-10 pages

B)

Q) Write a JSP to accept eno, ename and salary. Insert these records in emp.
(Create the emp table with these three fields).

Refer to Pg No:14 Slip No:2 (B) of EJ solutions 1-10 pages

Pg No:16 Slip No:2

B)

Q) Develop servlet application of basic calculator.

Refer to Pg No:15 Slip No:12(B) of EJ solutions 1-10 pages

Pg NO:16 Slip No:3

Q) Develop a simple JSP application to pass values from one page to another with validations. (Name-txt, age-txt, hobbies-checkbox, email-txt, gender-radio button).

Refer to Pg No:13 Slip No:2 (B) of EJ solutions 1-10 pages

Pg 16-3-2

Q) Develop servlet application of basic calculator.

Solution :- refer Pg 15-2-2

Refer to Pg No:15 Slip No:2 (B) of EJ solutions 1-10 pages

Pg No:17 Slip No:1

Login.html

```
<html>

<body>

<h1>Login Page</h1>

<form action="Login.jsp" >

Enter User Name <input type="text" name="txtName" ><br>

Enter Password <input type="password" name="txtPass" ><br>

<input type="reset" ><input type="submit" value="~~~LOGIN~~" >

</form>

</body>

</html>
```

Login.jsp

```
<%@page contentType="text/html" import="java.sql.*"%>
<html><body>
<h1>Registration JSP Page</h1>
<%
String uname=request.getParameter("txtName");
String pass = request.getParameter("txtPass");
try{

Connection con = DriverManager.getConnection("jdbc:derby://localhost:1527/sa","sa","sa");
PreparedStatement stmt = con.prepareStatement("select pass from table1 where uname=?");
stmt.setString(1, uname);
ResultSet rs = stmt.executeQuery();
if(rs.next()){
if(pass.equals(rs.getString(1)))
{
out.println("<h1>~~~ LOGIN SUCCESSFULLL ~~~ </h1>");
}
}
else{
out.println("<h1>User Name not exist !!!!!</h1>");
}%>
<jsp:include page="Register.html" ></jsp:include>
<%
}
}catch(Exception e){out.println(e);}
%>
```

</body></html>

Register.html

```
<html><head><title>New User Registration Page</title></head>
<body>
<form action="Register.jsp" >
<h1> New User Registration Page</h1>
Enter User Name <input type="text" name="txtName" ><br>
Enter Password <input type="password" name="txtPass1" ><br>
Re-Enter Password<input type="password" name="txtPass2" ><br>
Enter Email<input type="text" name="txtEmail" ><br>
Enter Country Name <input type="text" name="txtCon" ><br>
<input type="reset" ><input type="submit" value="REGISTER" >
<p>After Clicking on Register button,you will be redirected to Login Page as your details get registered.</p>
</form>
</body>
</html>
```

Register.jsp

```
<%@page contentType="text/html" import="java.sql.*"%>
<html><body>
<h1>Registration JSP Page</h1>
<%
String uname=request.getParameter("txtName");
String pass1 = request.getParameter("txtPass1");
String pass2 = request.getParameter("txtPass2");
String email = request.getParameter("txtEmail");
String ctry = request.getParameter("txtCon");
if(pass1.equals(pass2)){
try{

Connection con = DriverManager.getConnection("jdbc:derby://localhost:1527/sa","sa","sa");
PreparedStatement stmt = con.prepareStatement("insert into table1 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");%><jsp:forward page="Login.html" ></jsp:forward>
<%}
else {
out.println("Registration FFFFFAAAIILLLL !!!!!");
%><jsp:include page="Register.html" ></jsp:include>
<%}
}
}catch(Exception e){out.println(e);}
}
else
{
out.println("<h1>Password Mismatch</h1>");
%>
<jsp:include page="Register.html" ></jsp:include>
<%}
%>
</body>
</html>
```

Pg No:17 Slip No:2

Step 1:-Connect default database provided by Netbeans.

Step 2:-Create Table Inventory{

itemid int PRIMARY KEY,
itemName varchar(50),
description varchar(200),
quantity int,
addedDate varchar(40));

Adding Data to Table is not necessary.

Step 3:-Create New Web Project.

Step 4:-Right click on the Project->New->Other->Choose 'Persistence' in Categories Section->Choose 'Entity Classes From Database' from File Type Categories->Next->In Data Source,choose the default sample database->Choose 'Inventory' From Available Tables->Add->Next->Give a package name->Next->Finish.

Step 5:- Right click on the Project->New->Other->Choose 'Persistence' in Categories Section->Choose 'JSF Pages From Entity Classes' from File Type Categories->Next->Choose 'PackageName.Inventory" From available Entity Classes->Add->Next->Give a Session Bean Package Name different than JSF classes Package Name->Give JSF Pages Folder Name->Next->Finish.
 Step 6:Right Click on Project->Build.
 Step 7:Right Click on Project->Deploy.
 Step 8:Right Click on Project->Run.
 Step 9:-Now Add,Update and Delete Records in your Database through Browser.

Pg No:17 Slip No:3

Step 1:-Connect default database provided by Netbeans.
 Step 2:-Create Table Guest{
 GuestNo int PRIMARY KEY,
 GuestName varchar(50),
 Message varchar(100),
 VisitDate varchar(40));

Adding Data to Table is not necessary.

Step 3:-Create New Web Project.
 Step 4:-Right click on the Project->New->Other->Choose 'Persistence' in Categories Section->Choose 'Entity Classes From Database' from File Type Categories->Next->In Data Source,choose the default sample database->Choose 'Inventory' From Available Tables->Add->Next->Give a package name->Next->Finish.
 Step 5:- Right click on the Project->New->Other->Choose 'Persistence' in Categories Section->Choose 'JSF Pages From Entity Classes' from File Type Categories->Next->Choose 'PackageName.Guest" From available Entity Classes->Add->Next->Give a Session Bean Package Name different than JSF classes Package Name->Give JSF Pages Folder Name->Next->Finish.
 Step 6:Right Click on Project->Build.
 Step 7:Right Click on Project->Deploy.
 Step 8:Right Click on Project->Run.
 Step 9:-Now Add,Update and Delete Records in your Database through Browser.

Pg No:18 Slip No:1

Step 1:-Connect default database provided by Netbeans.
 Step 2:-Create Table Book{
 BookNo int PRIMARY KEY,
 ISBN varchar(30),
 BookTitle varchar(100),
 Author varchar(100),
 Edition varchar(30),
 PYear varchar(100),
 Publisher varchar(100),
 Quantity varchar(30));

Adding Data to Table is not necessary.

Step 3:-Create New Web Project.
 Step 4:-Right click on the Project->New->Other->Choose 'Persistence' in Categories Section->Choose 'Entity Classes From Database' from File Type Categories->Next->In Data Source,choose the default sample database->Choose 'Inventory' From Available Tables->Add->Next->Give a package name->Next->Finish.
 Step 5:- Right click on the Project->New->Other->Choose 'Persistence' in Categories Section->Choose 'JSF Pages From Entity Classes' from File Type Categories->Next->Choose 'PackageName.Inventory" From available Entity Classes->Add->Next->Give a Session Bean Package Name different than JSF classes Package Name->Give JSF Pages Folder Name->Next->Finish.
 Step 6:Right Click on Project->Build.
 Step 7:Right Click on Project->Deploy.
 Step 8:Right Click on Project->Run.
 Step 9:-Now Add,Update and Delete Records in your Database through Browser.

Pg No:18 Slip No:-2

A)

Index.html

```
<html><head><title>Calclator App</title></head><body>
```

```
<form action="CalculatorServlet" >
```

```

Enter First Number <input type="text" name="txtN1" ><br>
Enter Second Number <input type="text" name="txtN2" ><br>
Select an Operation

<input type="radio" name="opr" value="+">ADDITION
<input type="radio" name="opr" value="-">SUBTRACTION
<input type="radio" name="opr" value="*">MULTIPLY
<input type="radio" name="opr" value="/">DIVIDE <br>

<input type="reset">

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

</form></body></html>

```

CalculatorServlet.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 CalculatorServlet extends HttpServlet {

    public void doGet(HttpServletRequest request, HttpServletResponse response)

        throws ServletException, IOException {

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

        PrintWriter out = response.getWriter();

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

        double n1 = Double.parseDouble(request.getParameter("txtN1"));

        double n2 = Double.parseDouble(request.getParameter("txtN2"));

        double result =0;

```

```
String opr=request.getParameter("opr");  
if(opr.equals("+")) result=n1+n2; if(opr.equals("-")) result=n1-n2;  
if(opr.equals("*")) result=n1*n2; if(opr.equals("/")) result=n1/n2;  
out.println("<h1> Result = "+result); out.println("</body></html>");} }
```

Pg No:19 Slip No:2

A)

In <%--

Document : index

Created on : 6 Oct, 2019, 2:25:52 AM

Author : TEJAS

--%>

<%@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>

<jsp:include page="page1.jsp" flush="false"/>

```
</body>
</html>dex.jsp
Page1.jsp
<%--
    Document  : page1
    Created on : 6 Oct, 2019, 2:29:50 AM
    Author    : TEJAS
--%>

<%@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>Hello World!</h1>
    </body>
</html>
```

B)

Index.html

```
<!DOCTYPE html>
```

```
<!--
```

To change this license header, choose License Headers in Project Properties.

To change this template file, choose Tools | Templates

and open the template in the editor.

```
-->
```

```
<html>
```

```
  <head>
```

```
    <title>TODO supply a title</title>
```

```
    <meta charset="UTF-8">
```

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

```
  </head>
```

```
  <body>
```

```
    <form method="post" action="valid">
```

```
      UserName:<input type="text" name="t1"><br>
```

```
      Password:<input type="text" name="t2"><br>
```

```
      <input type="submit" value="send"><input type="reset" value="clear">
```

```
    </form>
```

```
  </body>
```

```
</html>
```


Valid.java

```
/*  
    * To change this license header, choose License Headers in Project Properties.  
    * To change this template file, choose Tools | Templates  
    * and open the template in the editor.  
    */
```

```
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;
```

```
/**  
 *  
 * @author TEJAS  
 */
```

```
public class valid extends HttpServlet {
```

```
    /**  
     * Processes requests for both HTTP GET and  
     POST
```

* methods.

*

* @param request servlet request

* @param response servlet response

* @throws ServletException if a servlet-specific error occurs

* @throws IOException if an I/O error occurs

*/

protected void doPost(HttpServletRequest request, HttpServletResponse
response)

throws ServletException, IOException {

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

try (PrintWriter out = response.getWriter()) {

String a=request.getParameter("t1");

String b=request.getParameter("t2");

if(a.equals("admin") && b.equals("admin"))

{

out.print("Valid"); }

else

{

out.print("Invalid");

}

}}