

### Q.1 to perform arithmetic operation

index.html:

```
<html><head><title>Calculator App</title></head><body>  
  
<form action="CalculatorServlet" method="Get">  
  
  Enter First Number <input type="number" name="N1"><br>  
  Enter Second Number <input type="number" name="N2"><br>  
  
  Select an Operation  
  
  <input type="radio" name="opr" value="+">ADDITION  
  <input type="radio" name="opr" value="-">SUBTRACTION  
  <input type="radio" name="opr" value="*">MULTIPLICATION  
  <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.*;  
  
import javax.servlet.*;  
  
import javax.servlet.http.*;  
  
  
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 = Integer.parseInt(request.getParameter("N1"));  
  
    double n2 = Integer.parseInt(request.getParameter("N2"));  
  
    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("Result = "+result);

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

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

    }

}

```

## Q2. to validate user name and password

index.html:

```

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

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

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.\*;

import javax.servlet.\*;

import javax.servlet.http.\*;

```

public class Loginservlet extends HttpServlet {

    protected void doGet(HttpServletRequest request, HttpServletResponse response)

        throws ServletException, IOException {

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

        PrintWriter out = response.getWriter();

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

        out.println("<html>");

        out.println("<head>");

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

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

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

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

        if(uname.equals("admin") &&upass.equals("12345")){

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

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

            }

            else

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

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

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

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

        }

    }
}

```

### **Q3. display implicit objects by jsp**

When you create a project then by default index.html will get created.  
by right click on source package you have to add jsp file and copy this code on their :

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

<html><head><title>JSP Page</title></head><body>

<h1>Use of Intrinsic Objects in JSP</h1>

<h1>Request Object </h1>

Query String <%=request.getQueryString() %><br>
Context Path <%=request.getContextPath() %><br>
Remote Host <%=request.getRemoteHost() %><br>

<h1>Response Object </h1>

Character Encoding Type <%=response.getCharacterEncoding() %><br>
Content Type
<%=response.getContentType() %><br>
Locale <%=response.getLocale() %><br>

<h1>Session Object </h1>

ID <%=session.getId() %><br>
Creation Time <%=new java.util.Date(session.getCreationTime()) %><br>
Last Access Time<%=new java.util.Date(session.getLastAccessedTime()) %><br>

</body>

</html>
```

then after save this file , run this file only by right click on this file

**Q4. to find number times user visited the page**

index.html::>

```
<html>

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

<body>

<form action="Pagel" >

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

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

</form>

</body>

</html>
```

Pagel.java::>

```
package mypack;

import java.io.*;

import javax.servlet.*;

import javax.servlet.http.*;

public class Pagel 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>Pagel</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>");

}}

Page2.java::>

package mypack;

import java.io.*;

import javax.servlet.*;

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("<h1><a href=Page3 >Click to visit page 3 </a></h1>");

        out.println("<h1><a href=Page4 >Click to visit Page 4 </a></h1>");

        out.println("<h1><a href=Page5 >Click to visit Page 5 </a></h1>");

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

```

```

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

```

Page3.java::>

```

package mypack;

import java.io.*;

import javax.servlet.*;

import javax.servlet.http.*;

public class Page3 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>Page3</title></head>");

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

        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("<h1><a href=Page2 >Click to visit page 2 </a></h1>");

        out.println("<h1><a href=Page4 >Click to visit Page 4 </a></h1>");

        out.println("<h1><a href=Page5 >Click to visit Page 5 </a></h1>");

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

```

```

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

```

Page4.java::>

```

package mypack;

import java.io.*;

import javax.servlet.*;

import javax.servlet.http.*;

public class Page4 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>Page4</title></head>");

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

        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("<h1><a href=Page3 >Click to visit page 3 </a></h1>");

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

        out.println("<h1><a href=Page5 >Click to visit Page 5 </a></h1>");

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

```



```

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

```

Page5.java::>

```

package mypack;

import java.io.*;

import javax.servlet.*;

import javax.servlet.http.*;

public class Page5 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>Page5</title></head>");

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

        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("<h1><a href=Page2 >Click to visit page 2 </a></h1>");

        out.println("<h1><a href=Page3 >Click to visit Page 3 </a></h1>");

        out.println("<h1><a href=Page5 >Click to visit Page 5 </a></h1>");

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

```

```

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

```

**Q5. to update sql tables by jsp page OR 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**

Database code:

```
create database employee;
```

```
use employee;
```

```
create table emp(empid varchar(10) PRIMARY KEY, ename varchar(50), salary varchar(50),age
varchar(50) );
```

```
insert into emp values('1','aaa','221234','11');
```

```
insert into emp values('2','bbb','334567','22');
```

```
insert into emp values('3','ccc','44454','33');
```

```
insert into emp values('4','ddd','55123','44');
```

```
select * from emp;
```

Index.html::>

```
<html>
```

```
<body>
```

```
<form action="UpdateEmp.jsp" >
```

```
Enter Employee Number<input type="text" name="txtEno" ><br>
```

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

```
Enter age<input type="text" name="txtAge" ><br>
```

```
Enter Salary<input type="text" name="txtSal" ><br>
```

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

```
</form>
```

```
</body>
```

```
</html>
```

UpdateEmp.jsp(create this jsp file using source packages)::>

```
<%@page contentType="text/html" import="java.sql.*" %>

<html><body>

<h1>Employee Record Update</h1>

<%

String eno=request.getParameter("txtEno");

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

String age = request.getParameter("txtAge");

String sal = request.getParameter("txtSal");

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

Connection con =

DriverManager.getConnection("jdbc:mysql://localhost:3306/employee?useSSL=false","root","root");

PreparedStatement stmt = con.prepareStatement("select * from emp where empid=?");

stmt.setString(1, eno);

ResultSet rs = stmt.executeQuery();

if(rs.next()){

out.println("<h1>~~~ Employee "+name+" Exist ~~~ </h1>");

PreparedStatement pst1= con.prepareStatement("update emp set salary=? where empid=?");

PreparedStatement pst2= con.prepareStatement("update emp set age=? where empid=?");

pst1.setString(1, sal);

pst1.setString(2, eno);

pst2.setString(1, age);

pst2.setString(2, eno);

pst1.executeUpdate();

pst2.executeUpdate();

}

else{

out.println("<h1>Employee Record not exist !!!!!</h1>");

}

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

```
}  
%></body></html>
```

#### Q6.Aim : Currency Converter Program

(Create a Currency Converter application using EJB)

index.html::>

```
<html><head><title>Currency Converter</title></head>  
<body>  
<form action="CCservlet" >  
Enter Amount <input type="text" name="amt"><br> Select Conversion Type  
<input type="radio" name="type" value="r2d" checked>Rupees to Dollar  
<input type="radio" name="type" value="d2r" >Dollar to Rupees<br>  
<input type="reset" ><input type="submit" value="CONVERT" >  
</form>  
</body>  
</html>
```

CCBean.java::>

```
package mybeans;  
  
import javax.ejb.Stateless; @Stateless  
  
public class CCBean { public CCBean(){}
```

```
public double r2Dollor(double r){ return r/65.65; } public double d2Rupees(double d){ return d*65.65; }}
```

CCservlet.java::>

```
package mypack;
```

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

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

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

```
import javax.ejb.EJB;
```

```
import mybeans.CCBean;
```

```
public class CCservlet extends HttpServlet { @EJB CCBean obj;
```

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

```
    throws ServletException, IOException {
```

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

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

```
        double amt = Double.parseDouble(request.getParameter("amt"));
```

```
        if(request.getParameter("type").equals("r2d")){
```

```
            out.println("<h1>"+amt+ " Rupees = "+obj.r2Dollor(amt)+" Dollors</h1>");
```

```
        if(request.getParameter("type").equals("d2r")){
```

```
            out.println("<h1>"+amt+ " Dollors = "+obj.d2Rupees(amt)+" Rupees</h1>");
```

```
        }}
```

```
    }
```

**Q7.USE REQUEST DEPATCHERS TO WELCOME USERS(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" method="Get" >
```

```
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::>

```
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.*;

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(uname.equals("admin") && 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::>

```

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.*;

public class WelcomeServlet 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(uname.equals("admin") && upass.equals("servlet"))
        {

            RequestDispatcher rd = request.getRequestDispatcher("LoginServlet");
            rd.forward(request, response);

        }
        else{

```

```

out.println("<body bgcolor=blue >");
out.println("<h1> Welcome To The World Of Servlet </h1>");
}
}
}

```

#### Q8.working with JSTL.( Create a JSP application to demonstrate the use of JSTL)

Index.html ::>

```

<html>

  <head>

    <title>JSP Page</title>

    <meta charset="UTF-8">

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

  </head>

  <body>

    <h1>hello world!</h1>

    <form action="newjsp.jsp">

      fname:<input type="text" name="ufname" /><br>

      lname:<input type="text" name="ulname" /><br>

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

    </form>

  </body>

</html>

```

newjsp.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>

    <b>Welcome ${param.uname} ${param.ufname}</b><br>

    <h1>Hello World!</h1><br>

<h1>get sum maths here</h1><br>

<p>is 5 less than 10? ${5<10}<br>

8*5=${8*5}<br></p>

</body>

</html>

```

**Q9. to view data from the database after submitting(Create a registration servlet in Java using JDBC. Accept the details such as Username, Password, Email, and Country from the user using HTML Form and store the registration details in the database)**

Database code::>

```
create database logindb;
```

```
use logindb;
```

```
create table user(username varchar(20) PRIMARY KEY, password varchar(20), email varchar(20),
```

```
country varchar(20));
```

```
insert into user values ('admin','admin','admin@admin.com','India');
```

```
select * from user;
```

**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="txtCon" ><br>
<input type="reset" ><input type="submit" value="REGISTER" >

</form>

</body> </html>

```

RegisterServlet.java::>

```

package mypack;

import java.io.*;

import java.sql.*;

import javax.servlet.*;

import javax.servlet.http.*;

public class RegisterServlet extends HttpServlet {

    public void doGet(HttpServletRequest request, HttpServletResponse response)

        throws ServletException, IOException {

        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("txtCon");

        try{

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

            Connection con

            =DriverManager.getConnection("jdbc:mysql://localhost:3306/logindb?useSSL=false","root","root");

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

            pst.setString(1,id);

            pst.setString(2,ps);

            pst.setString(3,em);

            pst.setString(4,co);

            int row = pst.executeUpdate();

            out.println("<hl>"+row+ " Inserted Succesfullyyyyy");

```

```

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

```

note: you need to add jar file for database connectivity

### Q10.develop a Simple Room Reservation System Application Using EJB.(Register user in database (Room Booking))

Database code:

Create table roombook(RoomId varchar(4) PRIMARY KEY, RoomType varchar(20), charges decimal, cust varchar(20), mob varchar(20) , status varchar(10));

insert into roombook values('1001','Delux',5000.000,"","','Not Booked');

insert into roombook values('1002','Super Delux',7000.00,"","','Not Booked');

insert into roombook values('1003','Suit',9500.00,"","','Not Booked') ;

insert into roombook values('2001','Delux',5000.00,"","','Not Booked');

insert into roombook values('2002','Super Delux',7000.00,"","','Not Booked');

insert into roombook values('2003','Suit',9500.00,"","','Not Booked');

select \* from roombook;

index.html ::>

<html>

<head>

<title>ROOM BOOKING</title>

</head>

<body>

<form action="RBServlet" >

Select a room Type

<input type="radio" name="txtType" value="Delux">Delux

<input type="radio" name="txtType" value="Super Delux">Super Delux

```
<input type="radio" name="txtType" value="Suit">Suit<br>
Enter Your Name<input type="text" name="txtCust" ><br>
Enter Mobile No.<input type="text" name="txtMob" ><br>
<input type="reset" ><input type="submit" value="Book Room">
</form>
```

```
</body>
</html>
```

RBServlet.java ::>

```
package mypack;

import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import javax.ejb.EJB;
import mybeans.RRbean;

public class RBServlet extends HttpServlet {

    @EJB RRbean obj;

    public void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException{
        PrintWriter out=response.getWriter();
        String rt=request.getParameter("txtType");
        String cn=request.getParameter("txtCust");
        String cm=request.getParameter("txtMob");
        String msg = obj.roombook(rt, cn, cm);
        out.println(msg);
    }
}
```

RRbean.java::>

```
package mybeans;

import javax.ejb.Stateless;
```

```

import java.sql.*;

@Stateless

public class RRbean {

    public RRbean(){

    }

    public String roombook(String rt, String cn, String cm){

        String msg="";

        try{

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

            Connection con =
            DriverManager.getConnection("jdbc:mysql://localhost:3306/logindb?useSSL=false","root","root");

            String query="select * from roombook where RoomType=? and status='Not Booked'";

            PreparedStatement pst = con.prepareStatement(query);

            pst.setString(1,rt);

            ResultSet rs= pst.executeQuery();

            if(rs.next()){

                String rno=rs.getString(1);

                PreparedStatement stmt1 = con.prepareStatement("update roombook set cust=? where RoomId=? ");

                PreparedStatement stm2 = con.prepareStatement("update roombook set mob=? where RoomId=? ");

                PreparedStatement stm3 = con.prepareStatement("update roombook set status=? where RoomId=? ");

                stmt1.setString(1,cn);

                stmt1.setString(2,rno);

                stm2.setString(1,cm);

                stm2.setString(2,rno);

                stm3.setString(1, "Booked"); stm3.setString(2,rno);

                stmt1.executeUpdate();

                stm2.executeUpdate();

                stm3.executeUpdate();

                msg = "Room "+rno+ " Booked Charges = "+rs.getString(3);

            }

            else

            {

```

```

msg = "Room "+rt+ " currently Not available";
}
}catch(Exception e){msg=""+e;}
return msg;
}
}

```

## Q11. Validating user by JSP

Index.html::

```

<html><head><title>User Information Page</title>
</head>
<body>
<form action="newjsp.jsp">
Enter Your Name<input type="text" name="name" ><br>
Enter Your Age<input type="text" name="age" ><br>
Select Hobbies
<input type="checkbox" name="hob" value="Singing">Singing
<input type="checkbox" name="hob" value="Reading">Reading Books
<input type="checkbox" name="hob" value="Football">Playing Football<br>
Enter E-mail<input type="text" name="email" ><br>
Select Gender
<input type="radio" name="gender" value="male">Male
<input type="radio" name="gender" value="female">Female
<input type="radio" name="gender" value="other">Other<br>
<input type="hidden" name="error" value="">
<input type="submit" value="Submit Form">
</form>
</body>
</html>

```

newjsp.jsp code:

```

<%@page contentType="text/html" pageEncoding="UTF-8" import="mypack.*" %>

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

<body>

<h1>Validation Page</h1>

<jsp:useBean id="obj" scope="request"
class="mypack.CheckerBean"
>

<jsp:setProperty name="obj" property=""/>

</jsp:useBean>

<%if (obj.validate())
{ %>

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

<% }

else {%>

<jsp:include page="index.html"/>

<%}%>

<%=obj.getError() %>

</body></html>

```

CheckerBean.java code::

```

package mypack;

public class CheckerBean {

private String name, age, hob, email, gender, error;

public CheckerBean(){error="";}

public void setName(String n){name=n;}

public void setAge(String a){age=a;}

public void setHob(String h){hob=h;}

public void setEmail(String e){email=e;}

public void setGender(String g){gender=g;}

```

```

public void setError(String e){error=e;}

public String getName(){return name;}

public String getAge(){return age;}

public String getHob(){return hob;}

public String getEmail(){return email;}

public String getGender(){return gender;}

public String getError(){return error;}

public boolean validate(){
    boolean res=true;

    if(name.trim().equals("")) {error+="<br>Enter First Name";res=false;}

    if(age.length() > 2 )
    {error+="<br>Age Invalid";res=false;}

    return res;
} }

```

Successful.jsp code::>

```

<%@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>Data Validated Successfully!!</h1>

</body>

</html>

```



**Q12. Create a registration and login JSP application to register and authenticate the user.**

Database code:

```
create database logindb;
```

```
use logindb;
```

```
create table user(username varchar(20) PRIMARY KEY, password varchar(20), email varchar(20),  
country varchar(20));
```

```
insert into user values ('admin','admin','admin@admin.com','India');
```

```
select * from user;
```

index.html code::>

```
<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" >
```

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

Register.jsp code ::>

```
<%@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{
        Class.forName("com.mysql.jdbc.Driver");

        Connection con =
        DriverManager.getConnection("jdbc:mysql://localhost:3306/logindb?useSSL=false","root","root");

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

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

        stmt.setString(3, email);    stmt.setString(4, ctry);

        int row = stmt.executeUpdate();

        if(row==1) { out.println("Registration Successful"); }

        else {

            out.println("Registration FFFFAAAIIIIIII !!!!!");

            %><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>

```

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 code ::>

```

<%@page contentType="text/html" import="java.sql.*"%>

<html><body>

<hl>Registration JSP Page</hl>

<%

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

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

try{

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

Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/logindb?useSSL=false","root","root");

PreparedStatement stmt = con.prepareStatement("select password from user where username=?");

stmt.setString(1, uname);

ResultSet rs = stmt.executeQuery();

if(rs.next()){

if(pass.equals(rs.getString(1)))

{

out.println("<hl>~~~ LOGIN SUCCESSFULL ~~~ </hl>");

}

}

else{

out.println("<hl>User Name not exist !!!!!</hl>");

}

}%>

<jsp:include page="Register.html" ></jsp:include>

```

```

<%
}
}catch(Exception e){out.println(e);}
%>
</body></html>

```

Q13.create a servlet application to upload file

Index.html::>

```

<html>

<body>

<form action="FileUploadServlet" method="post" enctype="multipart/form-data">
Select File to Upload:<input type="file" name="file" id="file">
Destination <input type="text" value="/tmp" name="destination">
<br>
<input type="submit" value="Upload file" name="upload" id="upload">
</form>
</body>
</html>

```

FileUploadServlet.java::>

```

package mypack;

import java.io.*;

import javax.servlet.*;

import javax.servlet.annotation.MultipartConfig;

import javax.servlet.http.*;

@MultipartConfig

public class FileUploadServlet extends HttpServlet {

public void doPost(HttpServletRequest req,HttpServletResponse res) throws ServletException,
IOException
{
res.setContentType("text/html");

```

```

PrintWriter out = res.getWriter();

String path=req.getParameter("destination");

Part filePart=req.getPart("file");

String filename=filePart.getSubmittedFileName().toString();

out.print("<br><br><hr> file name: "+filename);

OutputStream os=null;

InputStream is=null;

try {

os=new FileOutputStream(new File(path+File.separator+filename));

is=filePart.getInputStream();

int read=0;

while ((read = is.read()) != -1) {

os.write(read);

}

out.println("<br>file uploaded sucessfully...!!!");

}

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

}}

```

## 16.Expression language by using JSP.

**Code:**

**newjsp.jsp**

```

<%@ page language="java" contentType="text/html; charset=ISO-8859-1" pageEncoding="ISO-8859-1" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">

<html>

    <head>

        <meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">

        <title>Expression Language</title>

    </head>

```

```
<body>

    <%! int week = 7 ; %>

    <%

        switch (week) {

            case 1:

                out.println("Sunday");

                break;

            case 2:

                out.println("Monday");

                break;

            case 3:

                out.println("Tuesday");

                break;

            case 4:

                out.println("Wednesday");

                break;

            case 5:

                out.println("Thursday");

                break;

            case 6:

                out.println("Friday");

                break;

            case 7:

                out.println("Saturday");

                break;

            default:

                out.println("Please enter a valid input.");

                break;

        }

    %>

</body>
```

</html>

Q17.update mobile number of employee from the database:

**Database:**

create database updatemob; use updatemob;

create table mp(emp varchar(10) PRIMARY KEY, ename varchar(50), mobile varchar(50)); insert into emp values('1','aaa','221234');

insert into mp values('2','bbb','221234'); insert into mp values('3','c','221234'); insert into mp values('4','d','221234');

**Index.html :**

<html>

<body>

<form action="UpdateMob.jsp">

Enter Employee Number<input type="text" name="txtEno"><br> Enter Name<input type="text" name="txtName"><br>

Enter Mobile<input type="text" name="txtMob"><br>

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

</form>

</body>

</html>

**Updatemob.jsp:**

<%@page contentType="text/html" import="java.sql.\*" %>

<html><body>

<h1>Employee Record Update</h1>

<%

String emp=request.getParameter("txtEno"); String ename=request.getParameter("txtName"); String mobile =request.getParameter("txtMob"); try{

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

Connection con=

DriverManager.getConnection("jdbc:mysql://localhost:3306/updatemob?useSSL=false","root","root");

```
PreparedStatement stmt = con.prepareStatement("select * from mp where emp=?");
```

```
stmt.setString(1, emp);
```

```
ResultSet rs = stmt.executeQuery(); if(rs.next()){
```

```
out.println("<h1> ~~~Employee "+ename+" Exist~~~ </h1>");
```

```
PreparedStatement pstl=con.prepareStatement("update mp set mobile=? where emp=?"); pstl.setString (1, mobile);
```

```
pstl.setString(2, emp); pstl.executeUpdate();
```

```
}
```

```
else{
```

```
out.println("<h1>Employee Record not exist!!!!!!</h1>");}} catch(Exception e){out.print(e);}
```

```
%></body></html>
```

Q18. Insert marks of the student to the database

Index.html::>

```
<html><head><title>Marks Page</title></head>
```

```
<body>
```

```
<form action="MarksServlet" >
```

```
<H1>Welcome to Registration page</H1>
```

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

```
Enter Marks <input type="text" name="txtMarks"><br>
```

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

```
</form>
```

```
</body>
```

```
</html>
```

Student.java::>

```
package mypack;
```

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

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



```

import javax.servlet.*;

import javax.servlet.http.*;

public class student extends HttpServlet {

public void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

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

PrintWriter out = response.getWriter();

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

String mk = request.getParameter("txtMarks");

try{

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

Connection con =DriverManager.getConnection("jdbc:mysql://localhost:3306/logindb","root","root");

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

pst.setString(1,id);

pst.setString(2,mk);

int row = pst.executeUpdate();

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

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

}

}

```

Database code::>

```

create database StudentDB;

use StudentDB;

drop table StudentInfo;

create table StudentInfo(name varchar(20),marks varchar(20));

insert into StudentInfo values('1','22');

insert into StudentInfo values('2','92');

select * from StudentInfo;

```

