EXPT NO: **JAVA: JDBC** **DATE:**

AIM:
To implement Java Database Connectivity using OJDBC in Java.

ALGORITHM:

a) OBJECTIVE: Connectivity test: Write a java program to test the connectivity to the database.

1. Using DriverManager, connect to the locally installed database, here oracle with the username and password.
2. If the connection is established print success. Else print failure.

b) OBJECTIVE: Student details: Write the Jdbc code for student details(name, no, gender, five subjects mark, gpa calculation)

1. Create a table in the DB with the details specified and enter some data in it.
2. Using result set query, select the rows from the table and store them in variables accordingly and print till all rows are printed.

c) OBJECTIVE: Create, insert, update, delete in table: Write the Jdbc code to create a table, insert data into it, update it and delete.

1. Using prepared statement, write the queries and execute them.

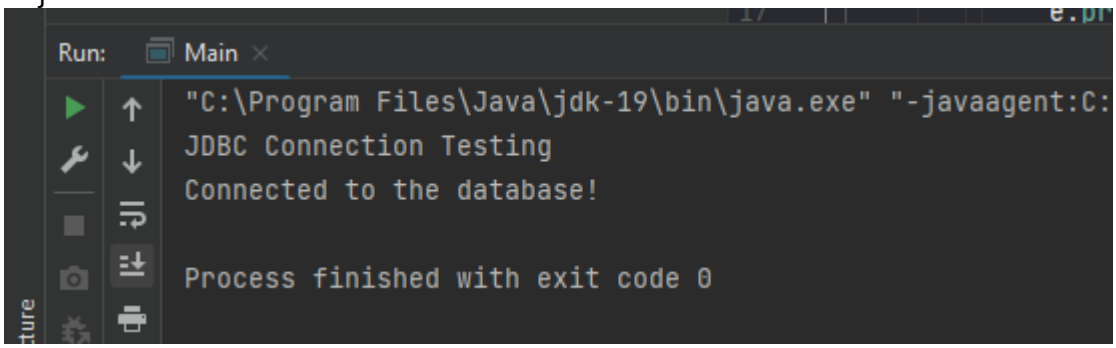
d) OBJECTIVE: Student details using swing: CoWrite the Jdbc code for student details using swing(previous, next, first, last, insert, update, delete options using respective buttons, input/display text boxes, gender using radio button)

1. Create a layout with text boxes to read input from the user for the student details.
2. Extract the details from them and store them in variables.
3. Insert those into tables using prepared statement execute query.

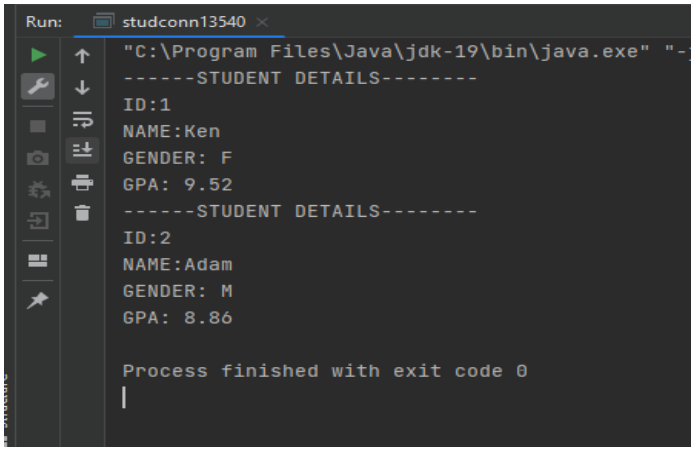
a. **Connectivity test:**

```
import java.sql.*;
public class Main {
   public static void main(String[] args) throws SQLException {
      System.out.println("JDBC Connection Testing ");
     try {
         Connection conn = DriverManager.getConnection(
               "jdbc:oracle:thin:@localhost:1521:orcl", "system", "Sam03sam");
         if (conn != null)
            System.out.println("Connected to the database!");
         else
            System.out.println("Failed to make connection!");
      } catch (SQLException e) {
         e.printStackTrace();
      } catch (Exception e) {
         e.printStackTrace();
      }
     }
```

```
}
```




```
SQL> select * from student;

    STUDID STUDNAME                  GE    ENGLISH      MATHS    SCIENCE     SOCIAL      TAMIL
---------- ------------------------- -- ---------- ---------- ---------- ---------- ----------
         1 Ken                       F          90         97         94         97         98
         2 Adam                      M          91         70         89         94         99

SQL>
```



1. **Jdbc code for student details(name, no, gender, five subjects mark, gpa calculation**

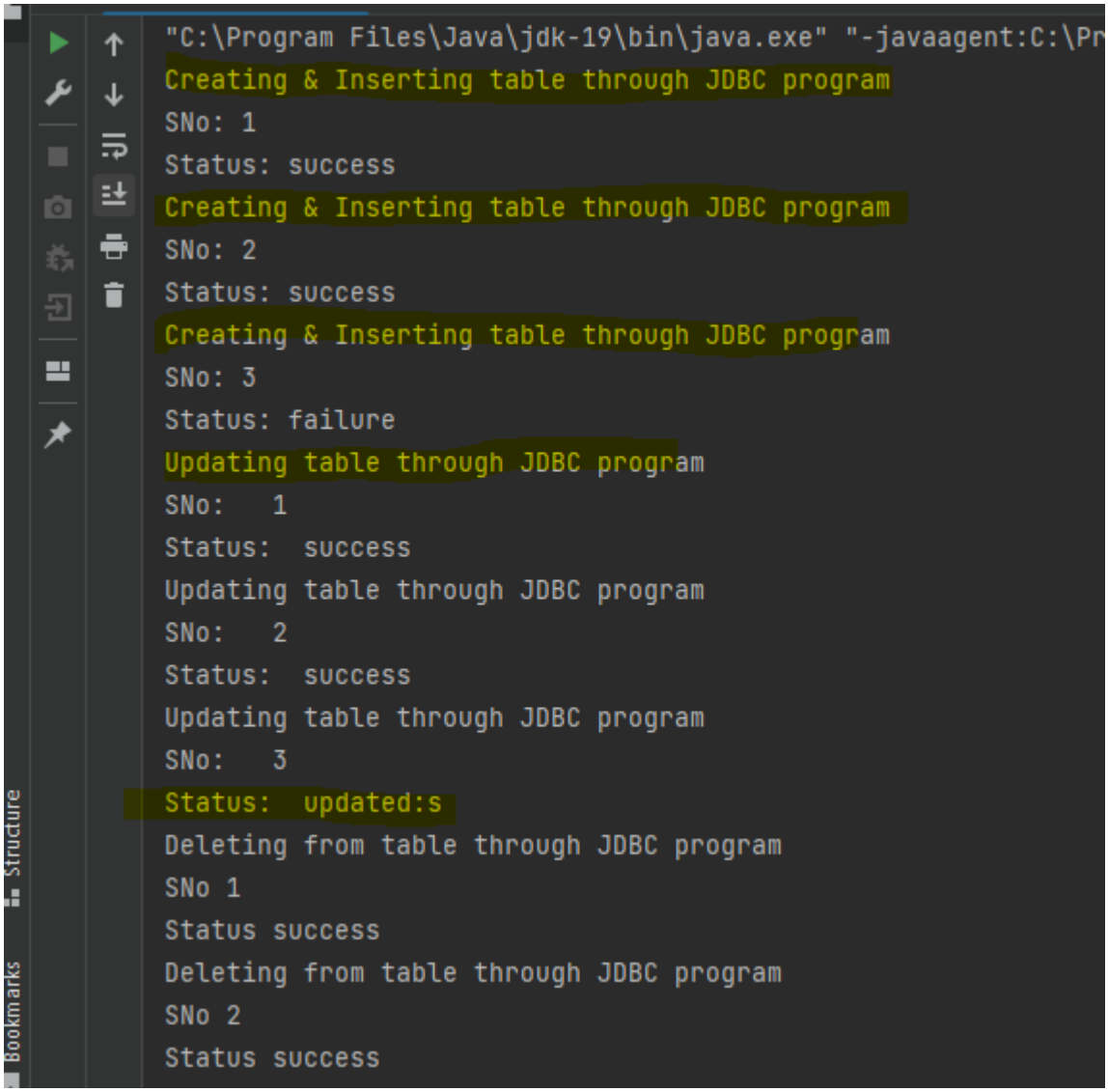
```
import java.sql.*;

public class studconn13540 {
   public static void main(String[] args) throws SQLException {
      Connection conn = DriverManager.getConnection(
            "jdbc:oracle:thin:@localhost:1521:orcl", "system", "Sam03sam");
      ResultSet rs = null;
      try {
         Statement st = conn.createStatement();
         rs = st.executeQuery("select * from student");
         while (rs.next()) {
            int sid = rs.getInt(1);
            String sname = rs.getString(2);
            String g = rs.getString(3);
            double emark = rs.getDouble(4);
            double mmark =  rs.getDouble(5);
            double scimark = rs.getDouble(6);
            double socmark = rs.getDouble(7);
            double tmark = rs.getDouble(8);
            System.out.println("------STUDENT DETAILS--------");
            System.out.println("ID:" + sid);
            System.out.println("NAME:" + sname);
            System.out.println("GENDER: "+g);
            double gpa = ((emark+mmark+scimark+socmark+tmark)/5)/10;
            System.out.println("GPA: "+gpa);
         }
      } catch (SQLException e) {
         System.out.println(e);

      }
   }
}
```

2. Create table , insert data, update, delete using JDBC Statement.

```
import java.sql.*;
public class tablequery3540 {
   public static void main(String[] args) throws SQLException {
      Connection conn = DriverManager.getConnection(
            "jdbc:oracle:thin:@localhost:1521:orcl", "system", "Sam03sam");
      Statement st = null;
      ResultSet rs = null;
      st = conn.createStatement();
      String str = "create table table1(sno int, value varchar(10) )  ";
      PreparedStatement stmnt = conn.prepareStatement(str);
      str = "insert into table1 values(1,'success')";
      stmnt = conn.prepareStatement(str);
```

```
stmnt.executeUpdate();
```

```
        str = "insert into table1 values(2,'success')";
        stmnt = conn.prepareStatement(str);
        stmnt.executeUpdate();
        str =  "insert into table1 values(3,'failure')";
        stmnt = conn.prepareStatement(str);
        stmnt.executeUpdate();
        str = "commit";
        stmnt = conn.prepareStatement(str);
        stmnt.executeUpdate();
        rs = st.executeQuery("select * from table1");
        while(rs.next()){
            int id = rs.getInt(1);
            String s = rs.getString(2);
            System.out.println("Creating & Inserting table through JDBC program");
            System.out.println("SNo: "+id);
            System.out.println("Status: "+s);
        }

        str = "update table1 set value='updated:s' where sno=3";
        stmnt = conn.prepareStatement(str);
        stmnt.executeUpdate();
        stmnt = conn.prepareStatement("commit");
        stmnt.executeUpdate();
        rs = st.executeQuery("select * from table1");
        while(rs.next()){
            int id = rs.getInt(1);
            String s = rs.getString(2);
            System.out.println("Updating table through JDBC program");
            System.out.println("SNo:   "+id);
            System.out.println("Status:  "+s);
        }
        str = "delete from table1 where sno=3";
        stmnt = conn.prepareStatement(str);
        stmnt.executeUpdate();
        stmnt = conn.prepareStatement("commit");
        stmnt.executeUpdate();
        rs = st.executeQuery("select * from table1");
        while(rs.next()){
            int id = rs.getInt(1);
            String s = rs.getString(2);
            System.out.println("Deleting from table through JDBC program");
            System.out.println("SNo "+id);
            System.out.println("Status "+s);
        }


    }
}
```

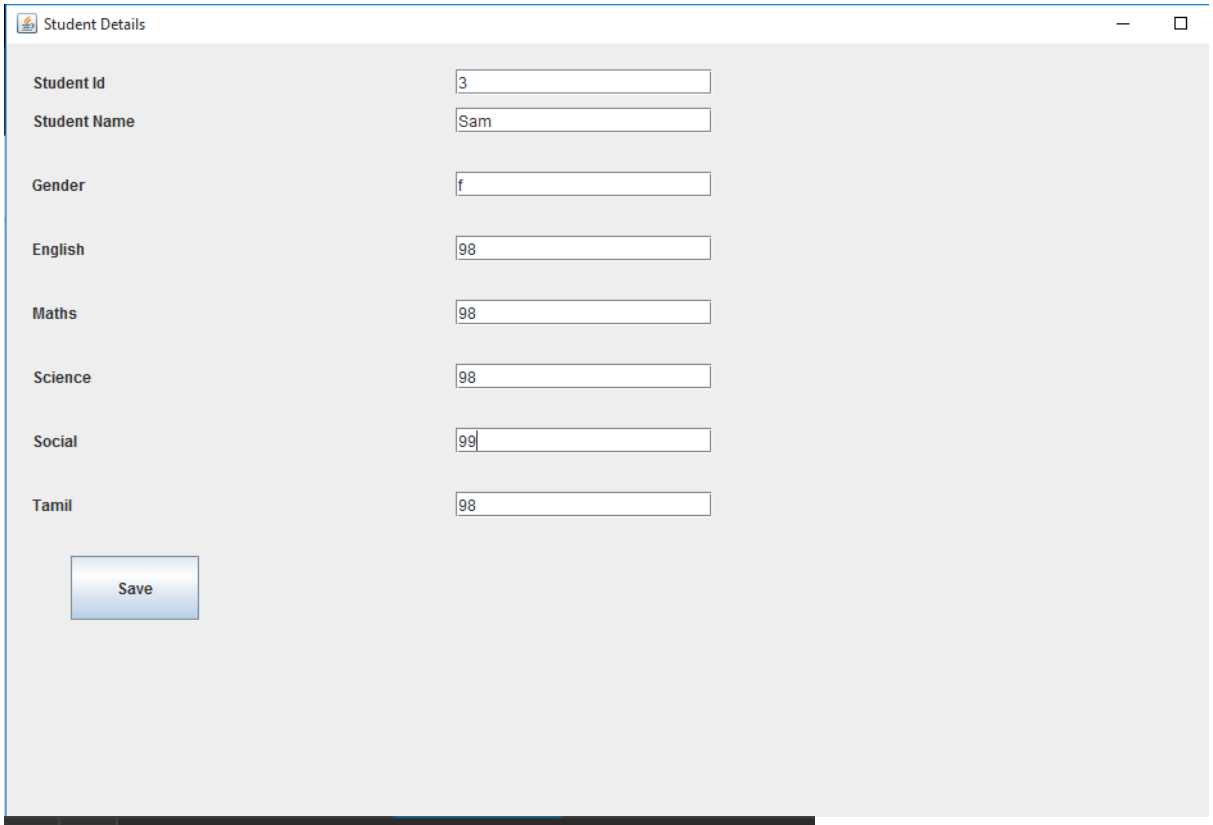

"C:\Program Files\Java\jdk-19\bin\java.exe" "-javaagent:C:\Pr
Creating & Inserting table through JDBC program
SNo: 1
Status: success
Creating & Inserting table through JDBC program
SNo: 2
Status: success
Creating & Inserting table through JDBC program
SNo: 3
Status: failure
Updating table through JDBC program
SNo: 1
Status: success
Updating table through JDBC program
SNo: 2
Status: success
Updating table through JDBC program
SNo: 3
Status: updated:s
Deleting from table through JDBC program
SNo 1
Status success
Deleting from table through JDBC program
SNo 2
Status success
Structure
Bookmarks

3.Code for student details using swing(previous, next, first, last, insert, update, delete options using respective buttons, input/display text boxes, gender using radio button)

```
import javax.swing.*;
import java.awt.event.ActionListener;
import java.sql.*;

public class studdetailsGUI3540 extends JFrame {
   public static void main(String[] args)  {
     new studdetailsGUI3540();
   }
    studdetailsGUI3540 (){
       JLabel l1 = new JLabel("Student Id");
       l1.setBounds(20,20,100,20);
       JTextField t1 = new JTextField(25);
       t1.setBounds(350,20,200,20);

       JLabel l2 = new JLabel("Student Name");
        l2.setBounds(20,50,100,20);
        JTextField t2 = new JTextField(25);
        t2.setBounds(350,50,200,20);

       JLabel l3 = new JLabel("Gender ");
       l3.setBounds(20,100,100,20);
       JTextField t3 = new JTextField(25);
       t3.setBounds(350,100,200,20);


       JLabel l4 = new JLabel("English");
       l4.setBounds(20,150,100,20);
       JTextField t4 = new JTextField(25);
       t4.setBounds(350,150,200,20);

       JLabel l5 = new JLabel("Maths");
       l5.setBounds(20,200,100,20);
       JTextField t5 = new JTextField(25);
       t5.setBounds(350,200,200,20);

       JLabel l6 = new JLabel("Science");
       l6.setBounds(20,250,100,20);
       JTextField t6 = new JTextField(25);
       t6.setBounds(350,250,200,20);

       JLabel l7 = new JLabel("Social");
       l7.setBounds(20,300,100,20);
       JTextField t7 = new JTextField(25);
       t7.setBounds(350,300,200,20);

       JLabel l8 = new JLabel("Tamil");
       l8.setBounds(20,350,100,20);
       JTextField t8 = new JTextField(25);
       t8.setBounds(350,350,200,20);

       JButton btn = new JButton("Save");
       btn.setBounds(50,400,100,50);
```

```
  JLabel l = new JLabel("dummy");
       l.setBounds(800,400,10,20);

        add(btn);
        add(l1);add(t1);
        add(l2);add(t2);
        add(l3);add(t3);
        add(l4);add(t4);
        add(l5);add(t5);
        add(l6);add(t6);
        add(l7);add(t7);
        add(l8);add(t8);
        add(l);
        btn.addActionListener(e -> {
            int sid = Integer.parseInt(t1.getText());
            int eng = Integer.parseInt(t3.getText());
            int math = Integer.parseInt(t4.getText());
            int soc= Integer.parseInt(t6.getText());
            int sci= Integer.parseInt(t5.getText());
            int tamil = Integer.parseInt(t7.getText());
            String studname = t2.getText();
            String g = t3.getText();
            Connection conn = null;
            try {
                conn =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:orcl","system","Sam03sam"
);
                ResultSet rs = null;
                int gpa = ((eng+math+sci+soc+tamil)/5)/10;
                PreparedStatement stmt = conn.prepareStatement("insert into student
values(?,?,?,?,?,?,?,?,?)");
                stmt.setInt(1,sid);
                stmt.setString(2,studname);
                stmt.setString(3,g);
                stmt.setInt(4,eng);
                stmt.setInt(5,math);
                stmt.setInt(6,sci);
                stmt.setInt(7,soc);
                stmt.setInt(8,tamil);
                stmt.setInt(9,gpa);
                stmt.executeUpdate();
                System.out.println("Entered into DB ");

            } catch (SQLException ex) {
                throw new RuntimeException(ex);
            }
            catch (Exception ex) {
                ex.printStackTrace();
            }

        });
        setTitle("Student Details ");
        setVisible(true);
        setLayout(null);
```

OP:




```
"C:\Program Files\Java\jdk-19\bin\java.exe
JDBC Connection Testing
Connected to the database!
Entered into DB
```

```
SQL> select * from student;

    STUDID STUDNAME                GE    ENGLISH      MATHS    SCIENCE     SOCIAL      TAMIL        GPA
---------- ----------------------- -- ---------- ---------- ---------- ---------- ---------- ----------
         1 Ken                     F          90         97         94         97         98
         2 Adam                    M          91         70         89         94         99
                                                                                              9.52
                                                                                              8.86
         9 Sam                     f          98         98         98         99         98
                                                                                              9.82
```

```
setSize(1000,1000);
        setDefaultCloseOperation(EXIT_ON_CLOSE);

    }
}
```

RESULT:

Hence the programs that implement the JDBC connection have been executed.

EXPT NO: **JAVA: JAVA SERVLETS** **DATE:**

AIM:

To implement Java Servlets using Tomcat Server in Intelllj.

ALGORITHM:

a)

1) Create the index.html file

2) get height and weight of the user

3) redirect to a calculator servlet and calculate the answer.

4) Print the result.

b)

1) Get the student's name, regno, subject and marks details.

2) Connect to the database for storing the details.

3) Calculate the GPA using a servlet.

4) Display the results in the form of a table on the web page

c)

1) Create a cookie with the site name and set expiration dates.

2) Start the server and maintain a hit count for number of visits.

3) Increment the count based on refreshes

4) Show the result

d)

1) Get username and password from user.

2) If it matches the stored credentials.

3) Print login successfull

e)

1) Get username and password from user.

2) Authenticate the user credentials

3) Display welcome page based on the user logged in by redirecting username between servlets.

70 Enter weight 1.72 Enter Height female Enter gender 21 Enter age Submit

You are healthy

bmi.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>BMI calculator</title>
</head>
<body>
<form method="post" action="ind">
  <input type="text" name="weight">Enter weight</input>
  <input type="text" name="height">Enter Height</input>
  <input type="text" name="gender">Enter gender</input>
  <input type="text" name="age">Enter age</input>
  <input type="submit"></input>
</form>
</body>
</html>
```

BMI.java:

```
import jakarta.servlet.http.HttpServlet;
import jakarta.servlet.http.HttpServletRequest;
import jakarta.servlet.http.HttpServletResponse;

import java.io.PrintWriter;

public class BMI extends HttpServlet {
  public void doPost(HttpServletRequest req, HttpServletResponse res) {
    try {
      res.setContentType("text/html");
      PrintWriter out = res.getWriter();
      double weight = Double.parseDouble(req.getParameter("weight"));
```

```
   double height = Double.parseDouble(req.getParameter("height"));
            String gender = req.getParameter("gender");
            int age= Integer.parseInt(req.getParameter("age"));
            double bmi= (weight)/(height*height);
//              out.println("bmi is "+bmi);
            if(age<18)
               out.println("Age is less than 18.. Consult doctor for children");
            else if(bmi<18.5)
               out.println("Underwight");
            else if(bmi>=18.5 && bmi<=24.9)
               out.println("You are healthy");
            else
               out.println("Overweight");
         } catch (Exception e) {
         }
      }
}
```

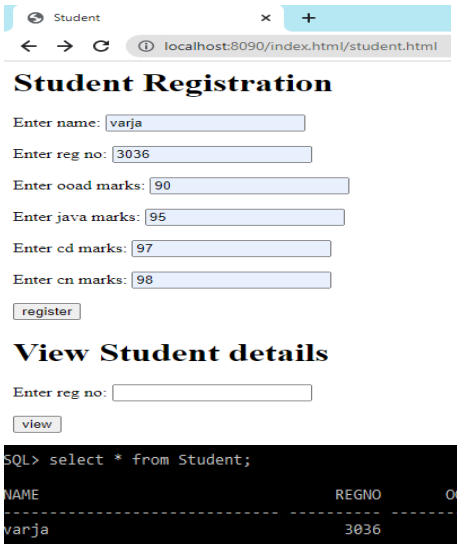
index.jsp:

```
<%@ page
import="jakarta.servlet.http.HttpServlet,jakarta.servlet.http.HttpServletRequest,jakarta.servlet.http.
HttpServletResponse,java.io.PrintWriter"%>


<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <title>BMI calculator</title>
</head>
</html>


<%
```

```
        double weight = Double.parseDouble(request.getParameter("weight"));
        double height = Double.parseDouble(request.getParameter("height"));
        String gender = request.getParameter("gender");
        int age= Integer.parseInt(request.getParameter("age"));
        double bmi= (weight)/(height*height);
//          out.println("bmi is "+bmi);
        if(age<18)
           out.println("Age is less than 18.. Consult doctor for children");
        else if(bmi<18.5)
           out.println("Underwight");
        else if(bmi>=18.5 && bmi<=24.9)
           out.println("You are healthy");
        else
           out.println("Overweight");
%>
```

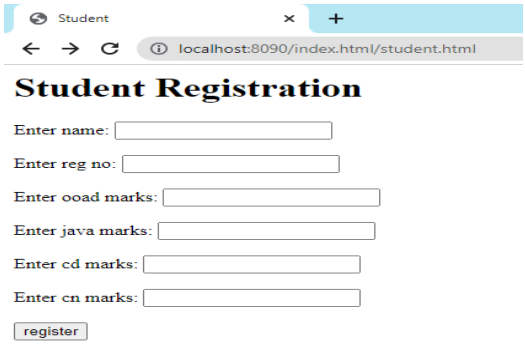
Web.xml:

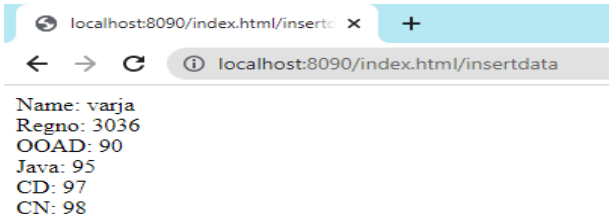
```
<servlet>
 <servlet-name>bmicalc</servlet-name>
 <servlet-class>BMI</servlet-class>

</servlet>
<servlet>
 <servlet-name>bmi-cal</servlet-name>
 <jsp-file>/index.jsp</jsp-file>
</servlet>
<servlet-mapping>

 <servlet-name>bmicalc</servlet-name>
 <url-pattern>/calc</url-pattern>
```




```
SQL> select * from Student;

NAME                           REGNO       OOAD       JAVA         CD         CN
------------------------------ ---------- ---------- ---------- ---------- ----------
varja                            3036         90         95         97         98
```

Viewdetails:





```
</servlet-mapping>


<servlet-mapping>


 <servlet-name>bmi-cal</servlet-name>

 <url-pattern>/ind</url-pattern>


</servlet-mapping>
```

2.

Student.html:

```
<head>
   <title>Student</title>
</head>
<body>
<h1>Student Registration</h1>
   <form method = "post" action = "insertdata">
      <label>Enter name: </label>
      <input type = "text" name = "name"><br><br>
      <label>Enter reg no: </label>
      <input type = "text" name = "regno"><br><br>
      <label>Enter ooad marks: </label>
      <input type = "text" name = "ooad"><br><br>
      <label>Enter java marks: </label>
      <input type = "text" name = "java"><br><br>
      <label>Enter cd marks: </label>
      <input type = "text" name = "cd"><br><br>
      <label>Enter cn marks: </label>
      <input type = "text" name = "cn"><br><br>
      <input type="submit" name="btn" value = "register">
   </form>
   <h1>View Student details</h1>
   <form action = "insertdata" method = "post">
      <label>Enter reg no: </label>
      <input type = "text" name = "regno"><br><br>
      <input type="submit" name="btn" value = "view">
   </form>
</body>
```

StudentServ:

```
import jakarta.servlet.http.HttpServlet;
import jakarta.servlet.http.HttpServletRequest;
import jakarta.servlet.http.HttpServletResponse;

import java.io.PrintWriter;
import java.sql.*;
```

```
public class StudentServ extends HttpServlet {
   public void doPost(HttpServletRequest request, HttpServletResponse response){
      if(request.getParameter("btn").equals("register")) {
         try {
            response.setContentType("text/html");
            String name = request.getParameter("name");
            int regno = Integer.parseInt(request.getParameter("regno"));
            int ooad = Integer.parseInt(request.getParameter("ooad"));
            int java = Integer.parseInt(request.getParameter("java"));
            int cd = Integer.parseInt(request.getParameter("cd"));
            int cn = Integer.parseInt(request.getParameter("cn"));

            System.out.println("Oracle JDBC Connection Testing ");
            Connection conn = null;
            ResultSet rs = null;
            Class.forName("oracle.jdbc.driver.OracleDriver");
            conn = DriverManager.getConnection(
                  "jdbc:oracle:thin:@localhost:1521:xe", "system",
                  "dcl");
            if (conn != null)
               System.out.println("Connected to the database!");
            else {
               System.out.println("Failed to make connection!");
               return;
            }


            PreparedStatement st = conn.prepareStatement("insert into Student
values(?,?,?,?,?,?)");
            st.setString(1, name);
            st.setInt(2, regno);
            st.setInt(3, ooad);
            st.setInt(4, java);
            st.setInt(5, cd);
            st.setInt(6, cn);
            st.executeQuery();
            response.sendRedirect("student.html");
            System.out.println("Values inserted");
         } catch (Exception e) {
            e.printStackTrace();
         }
      }
      else{
         try {
            response.setContentType("text/html");
            System.out.println("Oracle JDBC Connection Testing ");
            Connection conn = null;
            ResultSet rs = null;
            Class.forName("oracle.jdbc.driver.OracleDriver");
            conn = DriverManager.getConnection(
                  "jdbc:oracle:thin:@localhost:1521:xe", "system",
                  "dcl");
            if (conn != null){
               System.out.println("Connected to the database!");
```

```
  int regno = Integer.parseInt(request.getParameter("regno"));
                PreparedStatement st = conn.prepareStatement("select name ,regno, ooad ,
java, cd, cn from Student");
                rs = st.executeQuery();
                while(rs.next()) {
                    String name = rs.getString(1);
                    int reg = rs.getInt(2);
                    int ooad = rs.getInt(3);
                    int java = rs.getInt(4);
                    int cd = rs.getInt(5);
                    int cn = rs.getInt(6);
                    if(regno == reg) {
                        PrintWriter out = response.getWriter();
                        out.println("Name: " + name+"<br>");
                        out.println("Regno: " + regno+"<br>");
                        out.println("OOAD: " + ooad+"<br>");
                        out.println("Java: " + java+"<br>");
                        out.println("CD: " + cd+"<br>");
                        out.println("CN: " + cn+"<br>");
                        System.out.println("Retrieved");
                        break;
                    }
                }
            }

            else {
                System.out.println("Failed to make connection!");
                return;
            }

        }
        catch (Exception e){
            e.printStackTrace();
        }
    }
  }
}
```

Web.xml:

```
<web-app>
  <display-name>Archetype Created Web Application</display-name>
 <servlet>
    <servlet-name>stud</servlet-name>
    <servlet-class>StudentServ</servlet-class>
  </servlet>
  <servlet-mapping>
    <servlet-name>stud</servlet-name>
    <url-pattern>/insertdata</url-pattern>
  </servlet-mapping>
</web-app>
```

Name: dhanya

go

Hello You are the 2th visitor to this sight

```
3.import jakarta.servlet.http.Cookie;
import jakarta.servlet.http.HttpServlet;
import jakarta.servlet.http.HttpServletRequest;
import jakarta.servlet.http.HttpServletResponse;

import java.io.PrintWriter;



public class FirstServlet extends HttpServlet {

   public void doPost(HttpServletRequest request, HttpServletResponse response){
      try{

         response.setContentType("text/html");
         PrintWriter out = response.getWriter();

         String n=request.getParameter("userName");
         out.print("Welcome "+n);

         Cookie ck=new Cookie("userName",n);//creating cookie object
         response.addCookie(ck);//adding cookie in the response

         //creating submit button
         out.print("<form action='servlet2' method='post'>");
         out.print("<input type='submit' value='go'>");
         out.print("</form>");

         out.close();

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

```
 }
}
```

SecondServlet.java:

```
import jakarta.servlet.http.Cookie;
import jakarta.servlet.http.HttpServlet;
import jakarta.servlet.http.HttpServletRequest;
import jakarta.servlet.http.HttpServletResponse;

import java.io.PrintWriter;

public class SecondServlet extends HttpServlet {

   public void doPost(HttpServletRequest request, HttpServletResponse response){
      try{

         response.setContentType("text/html");
         PrintWriter out = response.getWriter();

         Cookie ck[]=request.getCookies();
         out.print("Hello ");
         out.println("You are the "+ck.length+"th visitor to this sight");
         out.close();

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


}
```

index.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <title>Cookie count</title>
</head>
<body>
<form action="servlet1" method="post">
   Name:<input type="text" name="userName"/><br/>
   <input type="submit" value="go"/>
</form>



</body>
</html>
```

Web.xml:

```
<servlet>
 <servlet-name>s1</servlet-name>
 <servlet-class>FirstServlet</servlet-class>
</servlet>

<servlet-mapping>
 <servlet-name>s1</servlet-name>
 <url-pattern>/servlet1</url-pattern>
</servlet-mapping>

<servlet>
 <servlet-name>s2</servlet-name>
 <servlet-class>SecondServlet</servlet-class>
</servlet>
```

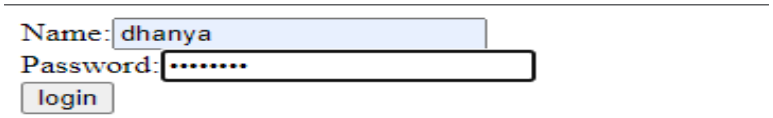
```
<servlet-mapping>
  <servlet-name>s2</servlet-name>
  <url-pattern>/servlet2</url-pattern>
</servlet-mapping>

import jakarta.servlet.ServletException;
import jakarta.servlet.http.HttpServlet;
import jakarta.servlet.http.HttpServletRequest;
import jakarta.servlet.http.HttpServletResponse;
import jakarta.servlet.http.HttpSession;

import java.io.IOException;
import java.io.PrintWriter;
public class LoginServlet extends HttpServlet {
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
            throws ServletException, IOException {
        response.setContentType("text/html");
        PrintWriter out=response.getWriter();
        request.getRequestDispatcher("link.html").include(request, response);

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

        if(password.equals("admin123")){
            out.print("Welcome, "+name);
            HttpSession session=request.getSession();
            session.setAttribute("name",name);
            ;
        }
        else{
            out.print("Sorry, username or password error!");
```

```
    request.getRequestDispatcher("login.html").include(request, response);
      }
      out.close();
   }
}
```

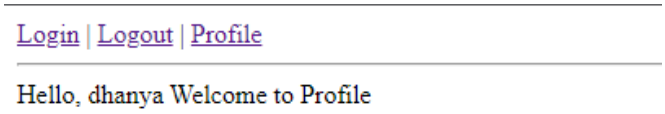
LogoutServlet.java:

```
import jakarta.servlet.ServletException;
import jakarta.servlet.http.HttpServlet;
import jakarta.servlet.http.HttpServletRequest;
import jakarta.servlet.http.HttpServletResponse;
import jakarta.servlet.http.HttpSession;

import java.io.IOException;
import java.io.PrintWriter;
public class LogoutServlet extends HttpServlet {
   protected void doGet(HttpServletRequest request, HttpServletResponse response)
         throws ServletException, IOException {
      response.setContentType("text/html");
      PrintWriter out=response.getWriter();

      request.getRequestDispatcher("link.html").include(request, response);

      HttpSession session=request.getSession();
      session.invalidate();

      out.print("You are successfully logged out!");

      out.close();
   }
}
```

OUTPUT:



Current session:



login.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <title>Title</title></head>
<body>
<form action="LoginServlet" method="post">
   Name:<input type="text" name="name"><br>
   Password:<input type="password" name="password"><br>
   <input type="submit" value="login">
</form>
</body>
</html>
```

5.

```
import jakarta.servlet.ServletException;
import jakarta.servlet.http.HttpServlet;
import jakarta.servlet.http.HttpServletRequest;
import jakarta.servlet.http.HttpServletResponse;
import jakarta.servlet.http.HttpSession;

import java.io.IOException;
import java.io.PrintWriter;
public class Login extends HttpServlet {
   protected void doPost(HttpServletRequest request, HttpServletResponse response)
         throws ServletException, IOException {
      response.setContentType("text/html");
      PrintWriter out=response.getWriter();
      request.getRequestDispatcher("link.html").include(request, response);

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

Name: dhanya
Password: ••••••••
login

Login success

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

      if(password.equals("admin123")){
         out.print("Welcome, "+name);
         HttpSession session=request.getSession();
         session.setAttribute("name",name);
         ;
      }
      else{
         out.print("Sorry, username or password error!");
         request.getRequestDispatcher("login.html").include(request, response);
      }
      out.close();
   }
}
```

login.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <title>Title</title></head>
<body>
<form action="LoginServlet" method="post">
   Name:<input type="text" name="name"><br>
   Password:<input type="password" name="password"><br>
   <input type="submit" value="login">
</form>
</body>
</html>
```

RESULT: Thus he servlets code are implemented and the output is obtained.

ANNA UNIVERSITY
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BONAFIDE CERTIFICATE

Name :.....

Subject :.....

Department :.....

REGISTER NO. ☐☐☐☐☐☐☐☐☐☐☐☐

Certified that the bonafide record of practical work done by

Mr./Miss.....

in the.....*Laboratory subject code*.....*during the*

Period.....*20 - 20*

Date : COURSE-IN-CHARGE

Submitted for the practical Examination held on.....

.....

Examiners

1.

2.