

PRACTICAL 10

Practical Definition :

- Write a database application that use any JDBC driver.

➤ Source Code :

```
import java.sql.*;
public class test {
    public static void main(String ar[])
    {
        Connection cn=null;
        ResultSet rs;
        Statement st=null;
        try{
            Class.forName("com.mysql.jdbc.Driver");
            cn=DriverManager.getConnection("jdbc:mysql://localhost/test","root","");
            st=cn.createStatement();
            rs=st.executeQuery("select * from registration");
            while(rs.next())
            {
                System.out.println(rs.getString(1)+" "+rs.getString(2));
            }
        }
        catch(SQLException e)
        {
            System.out.println("Error while fetching records");
            e.printStackTrace();
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
    }
}
```

➤ **Program Output :**

Ramesh Ahmedabad
Dinesh Gandhinagar

name	address	gender	phone
Ramesh	Ahmedabad	Male	9898996600
Dinesh	Gandhinagar	Male	8800324567

PRACTICAL 11

Practical Definition :

- Develop a UI that performs the following SQL operations: 1) Insert 2) Delete 3) Update.

➤ Source Code :

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

public class updateapplet extends JFrame implements ActionListener
{
    JButton b1,b2,b3;
    JTextField no;
    JTextField name;
    JLabel l1,l2,l3;
    int n;
    updateapplet(String str)
    {
        setLayout(null);
        no=new JTextField();
        no.setBounds(100,100,50,20);
        name=new JTextField();
        name.setBounds(100,150,50,20);
        l1=new JLabel("Eno");
        l1.setBounds(50,100,30,20);
        l2=new JLabel("Name");
        l2.setBounds(50,150,50,20);
        l3=new JLabel("Status Shown Here");
        l3.setBounds(170,350,200,30);
```

```
JButton b1=new JButton("insert");
b1.setBounds(170,200,80,40);
JButton b2=new JButton("delete");
b2.setBounds(170,250,80,40);
JButton b3=new JButton("update");
b3.setBounds(170,300,80,40);
add(l1);
add(no);
add(l2);
add(name);
add(b1);
add(b2);
add(b3);
add(l3);
b1.addActionListener(this);
b2.addActionListener(this);
b3.addActionListener(this);
}

public void actionPerformed(ActionEvent e1){
String s,s1,op;
op=e1.getActionCommand();
s=no.getText();
n=Integer.parseInt(s);
s1=name.getText();
Connection cn=null;
Statement st=null;
try{
    Class.forName("com.mysql.jdbc.Driver");
    cn=DriverManager.getConnection("jdbc:mysql://localhost/ajava","root","");
    st=cn.createStatement();
    if(op=="insert")
    {
        st.executeUpdate("insert into empo(eno,ename) values('"+n+"','"+s1+"')");
        l3.setText("data is inserted successfully");
        no.setText("");
        name.setText("");
    }
}
```

```
        if(op=="update")
        {
            st.executeUpdate("update empo set ename='"+s1+"' where eno='"+n+"' ");
            l3.setText("data is updated successfully");
            no.setText("");
            name.setText("");
        }
        if(op=="delete")
        {
            st.executeUpdate("delete from empo where eno='"+n+"' AND ename='"+s1+"' ");
            l3.setText("data is deleted successfully");
            no.setText("");
            name.setText("");
        }
    }
    catch(SQLException e)
    {
        System.out.println("Error");
        e.printStackTrace();
    }
    catch(Exception e)
    {
        e.printStackTrace();
    }
}

public static void main(String ar[])
{
    updateapplet jf=new updateapplet("Insert demo");
    jf.setSize(500,500);
    jf.setVisible(true);
}
}
```

➤ **Program Output :**



A screenshot of a Java Swing window. The window has a title bar with standard OS controls. Inside, there are two text input fields: 'Eno' with the value '1' and 'Name' with the value 'Parv'. Below these fields are three buttons labeled 'insert', 'delete', and 'update' stacked vertically. At the bottom of the window, there is a label 'Status Shown Here'.



A screenshot of the same Java Swing window after the 'insert' button has been clicked. The 'Eno' and 'Name' fields are now empty. The status area at the bottom now displays the message 'data is inserted successfully'.

PRACTICAL 12

Practical Definition :

- Write a program to present a set of choice for user to select a product & display the price of product.

➤ Source Code :

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

public class prac13 extends
JFrame implements ItemListener {

    JComboBox jcb=new JComboBox();

    JLabel lb1,lb2;

    JTextField jt;

    prac13()
    {
        super("Fetching Product Information");

        setLayout(null);

        lb1=new JLabel("Choose Product:");

        lb2=new JLabel("Price:");

        jt=new JTextField(10);

        jt.setBounds(150,100,70,20);

        jcb.setBounds(150,50,100,20);

        lb1.setBounds(50,50,100,20);
```

```
lb2.setBounds(110,100,100,20);
jcb.addItem("iPhone 4s");
jcb.addItem("iPhone 5s");
jcb.addItem("iPhone 6s");

    add(jcb);
    add(jt);
    add(lb1);
    add(lb2);
    jcb.addItemListener(this);
}
public void itemStateChanged(ItemEvent ie)
{
    String str=(String)jcb.getSelectedItem();

    Connection cn=null;
    ResultSet rs;
    Statement st=null;
    String u="root";
    String p="";

    try{
        Class.forName("com.mysql.jdbc.Driver");
        cn=DriverManager.getConnection("jdbc:mysql://localhost/product",u,p);
        st=cn.createStatement();
        rs=st.executeQuery("select price from productdetail where name='"+str+"'");
        while(rs.next())
        {
            jt.setText(rs.getString(1));
        }
    }
    catch(SQLException e)
    {
        System.out.println("Error in fetching records");
        e.printStackTrace();

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



```
public static void main(String ar[])  
{  
    prac13 sw=new prac13();  
    sw.setVisible(true);  
    sw.setSize(500,500);  
}  
}
```

➤ **Program Output :**



PRACTICAL 13

Practical Definition :

- Write a simple servlet program which maintains a counter for the number of times it has been accessed since its loading, initialize the counter using deployment descriptor.

➤ **Source Code :**

```
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 NewServlet extends HttpServlet {
    private int hitCount;
    public void init()    {
        hitCount = Integer.parseInt(this.getInitParameter("counter"));
    }
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        hitCount++;
        out.println("the count is : " + hitCount);
    }
}
```

➤ **Program Output :**

Total No Of Count:5

PRACTICAL 14

Practical Definition :

- Create a form processing servlet which demonstrates use of cookies and sessions.

➤ Source Code :

//login.html

```
<html>
<head>

</head>
<body>
    <form action="session" method="post">
        Name<input type="text" name="name">
        <input type="submit" value="submit">
    </form>
</body>
</html>
```

//session.java

```
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.*;

public class session extends HttpServlet {
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        PrintWriter o=response.getWriter();
        String n=request.getParameter("name");
        o.println("welcome");
        Cookie c1=new Cookie("name",n);
        response.addCookie(c1);
    }
}
```

```
    HttpSession session=request.getSession();
    session.setAttribute("name",n);

    o.println("<form action='accesscookie' method='post'>");
    o.println("<input type='submit' value='getcookie'> ");
    o.println("</form>");
    o.println("<form action='accesssession' method='post'>");
    o.println("<input type='submit' value='getsession'> ");
    o.println("</form>");
}
}
```

//accesssession.java

```
import java.io.*;
import javax.servlet.ServletException;
import javax.servlet.http.*;

public class accesssession extends HttpServlet {

    protected void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        PrintWriter out = response.getWriter();
        HttpSession session=request.getSession(false);
        String n=(String)session.getAttribute("name");
        out.println("session =" +n);
    }
}
```

//accesscookie.java

```
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.*;
import javax.servlet.http.*;

public class accesscookie extends HttpServlet {
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        PrintWriter out = response.getWriter();
        out.println("cookie accessed....");
        out.println("<br>");
        Cookie ck[]=request.getCookies();
        int i=0;
```

```
        out.println("cookie value="+ck[i].getValue());  
    }  
}
```

➤ **Program Output :**

Name

Name

welcome

cookie accessed....
cookie value=ABC

session =ABC

PRACTICAL 15

Practical Definition :

- Write a simple JSP program for user Registration & then control will be transfer it into second page.

➤ Source 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>
    <form action="display.jsp">
      First Name : <input type="text" name="fname" value="" /><br> Last Name
      : <input type="text" name="lname" value="" /><br> Enrollment Number :
      <input type="number" name="eno" value="" /><br>
      Address : <textarea name="addr" rows="4" cols="20"
inputmode="number"></textarea><br>
      Contact Number : <input type="number" name="contact" value="" /><br>
      <input type="submit" value="Submit" />
    </form>
  </body>
</html>
```

//Display.jsp

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

```
<!DOCTYPE html>
```

```
<%
```

```
    String result = " ";
```

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

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

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

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

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

```
    out.println("hello "+fname + " " + lname);
```

```
    out.println("<br> your details are ");
```

```
    out.println("Enrollment Number : "+ eno + "<br>");
```

```
    out.println("Address : "+ addr+ "<br>");
```

```
    out.println("Contact Number : "+ contact+ "<br>");
```

```
%>
```

➤ **Program Output :**

Name:-	<input type="text"/>
Address:-	<input type="text"/>
Contact No:-	<input type="text"/>
E-mail:-	<input type="text"/>
Hobby:-	<input type="text" value="Cricket"/>
Gender:-	<input type="radio"/> Male <input type="radio"/> Female
<input type="button" value="Submit"/>	

PRACTICAL 16

Practical Definition :

- Write a simple JSP program for user login form with static & dynamic database

➤ Source Code :

//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="logprocess.jsp">
```

```
    Name : <input type="text" name="name" value="" /> <br>
```

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

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

```
</form>
```

```
</body>
```

```
</html>
```

//Loginprocess.jsp

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

```
<!DOCTYPE html>
```

```
<%
```

```
String name = request.getParameter("name");  
String pass = request.getParameter("pass");  
    if( name.toLowerCase().trim().equals("admin") &&  
pass.toLowerCase().trim().equals("admin"))  
    {  
        out.println("logged in successfully");  
    }  
else  
    {  
        out.println("wrong id nd password");  
    }  
%>
```

➤ **Program Output :**

Username:-

Password:-

PRACTICAL 17

Practical Definition :

- Write a JSP program to display the grade of a student by accepting the marks of five subjects.

➤ Source Code :

```
//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="display.jsp">

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

            Marks for Subject 1 : <input type="text" name="sub1" value="" /><br>

            Marks for Subject 2 : <input type="text" name="sub2" value="" /><br>

            Marks for Subject 3 : <input type="text" name="sub3" value="" /><br>

            Marks for Subject 4 : <input type="text" name="sub4" value="" /><br>

            Marks for Subject 5 : <input type="text" name="sub5" value="" /><br>

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

        </form>

    </body>

</html>
```

```
//display.jsp

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

<!DOCTYPE html>

<%

    String result = " ";

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

    String sub1 = request.getParameter("sub1");

    int s1 = Integer.parseInt(sub1);

    String sub2 = request.getParameter("sub2");

    int s2 = Integer.parseInt(sub2);

    String sub3 = request.getParameter("sub3");

    int s3 = Integer.parseInt(sub3);

    String sub4 = request.getParameter("sub4");

    int s4 = Integer.parseInt(sub4);

    String sub5 = request.getParameter("sub5");

    int s5 = Integer.parseInt(sub5);

    if(s1<35 || s2<35 || s3<35 || s4<35 || s5<35 || s1+s2+s3+s4+s5 < 175)

    {

        result = "Sorry , you have failed the exam";

    }

    else if(s1+s2+s3+s4+s5 >= 430){

        result = "Congratulations , you have got A+ Grade";

    }

    else if(s1+s2+s3+s4+s5 >= 350){

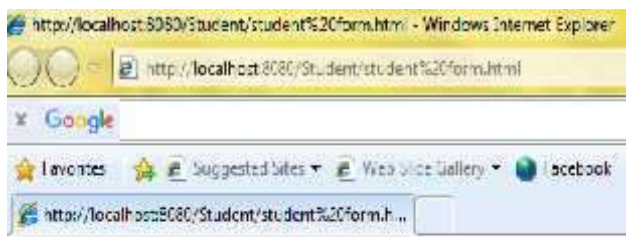
        result = "Congratulations , you have got A Grade";

    }

}
```

```
else if(s1+s2+s3+s4+s5 >= 270){  
    result = "Congratulations , you have got B Grade";  
}  
else if(s1+s2+s3+s4+s5 >= 200){  
    result = "Congratulations , you have got C Grade";  
}  
else if(s1+s2+s3+s4+s5 >= 175){  
    result = "Congratulations , you have got D Grade";  
}  
out.println("hello "+name);  
out.println(" , " + result);  
%>
```

➤ **Program Output :**



Student's Grade

Roll No:-1

Roll No:-	<input type="text"/>
Maths:-	<input type="text"/>
Science:-	<input type="text"/>
Social Science:-	<input type="text"/>
English:-	<input type="text"/>
Gujarati:-	<input type="text"/>
Submit	<input type="button" value="Submit"/>

Your Grade is:C