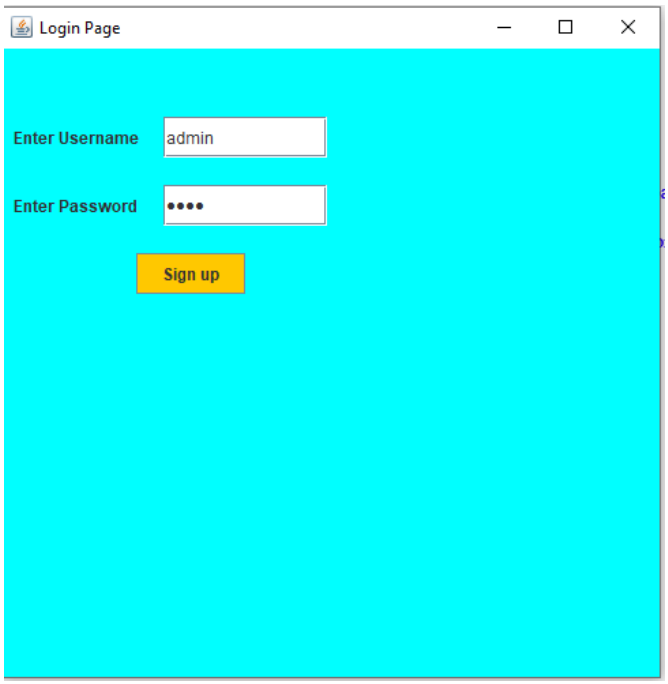
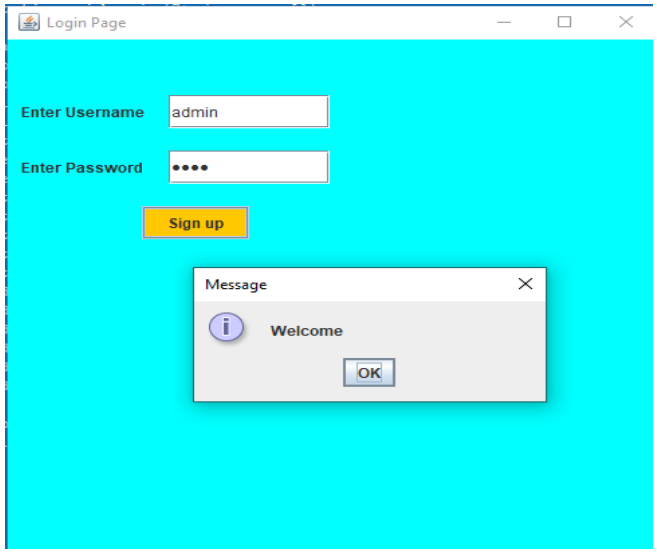
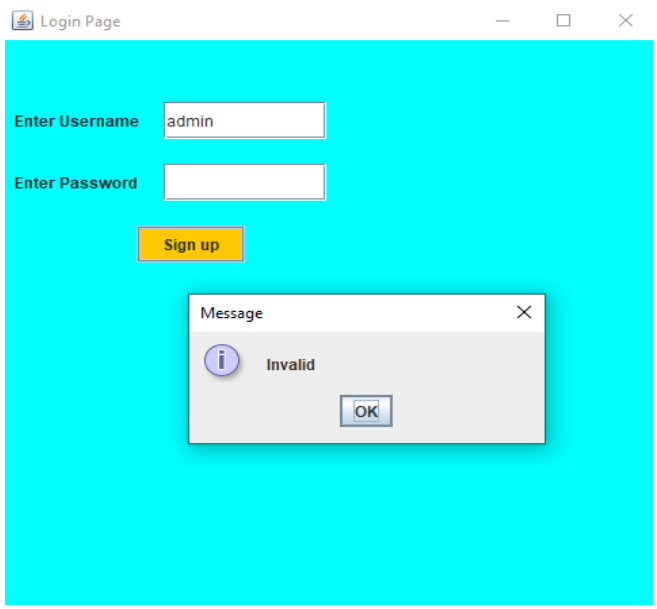
1. Write a Java swings program to demonstrate a login page with action listener.

```
import java.awt.Color;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import javax.swing.*;
public class login {
	public static void main(String args[])
	{
		JFrame j=new JFrame("Login Page");
		JLabel l1=new JLabel("Enter Username");
	    JLabel l2=new JLabel("Enter Password");
		final JTextField t=new JTextField();
		final JPasswordField p=new JPasswordField();
		JButton b=new JButton("Sign up");
		l1.setBounds(10, 50, 100, 30);
		l2.setBounds(10, 100, 100, 30);
		t.setBounds(120, 50, 120, 30);
		p.setBounds(120, 100, 120, 30);
		b.setBounds(100, 150, 80, 30);
		j.getContentPane().setBackground(Color.CYAN);
		b.setBackground(Color.ORANGE);
		j.add(l1);
		j.add(l2);
		j.add(t);
		j.add(p);
		j.add(b);
		b.addActionListener(new ActionListener()
		{
			public void actionPerformed(ActionEvent e) {
			if(t.getText().equals("admin")&&p.getText().equals("pass"))
				{
				JOptionPane.showMessageDialog(null, "Welcome");
				}
					else
				{
					JOptionPane.showMessageDialog(null,
"Invalid");
				}
				}

				});
		j.setSize(500,500);
		j.setLayout(null);
		j.setVisible(true);
	}}
```

Output:


Login Page
Enter Username
admin
Enter Password
Sign up


Login Page
Enter Username
admin
Enter Password
Sign up
Message
Welcome
OK

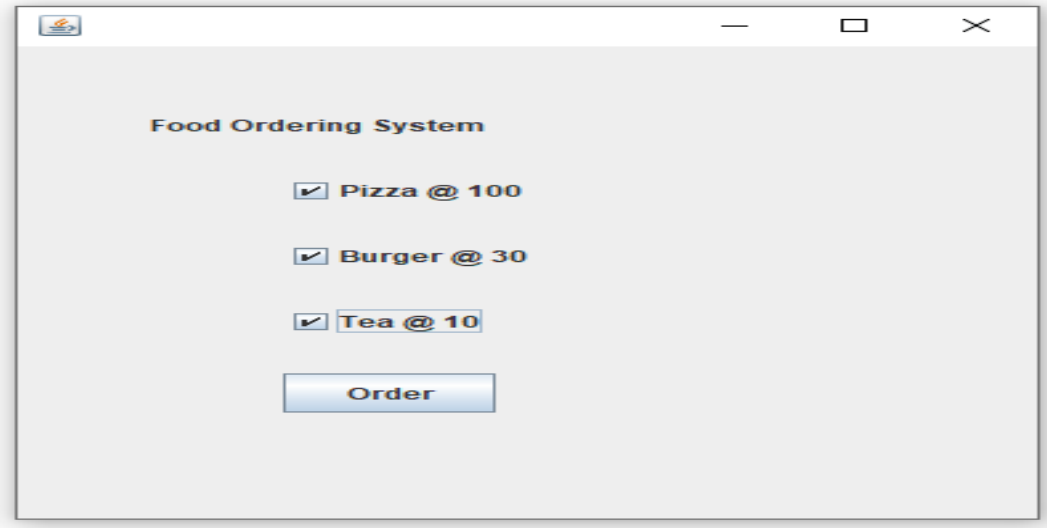

Login Page
Enter Username
admin
Enter Password
Sign up
Message
Invalid
OK

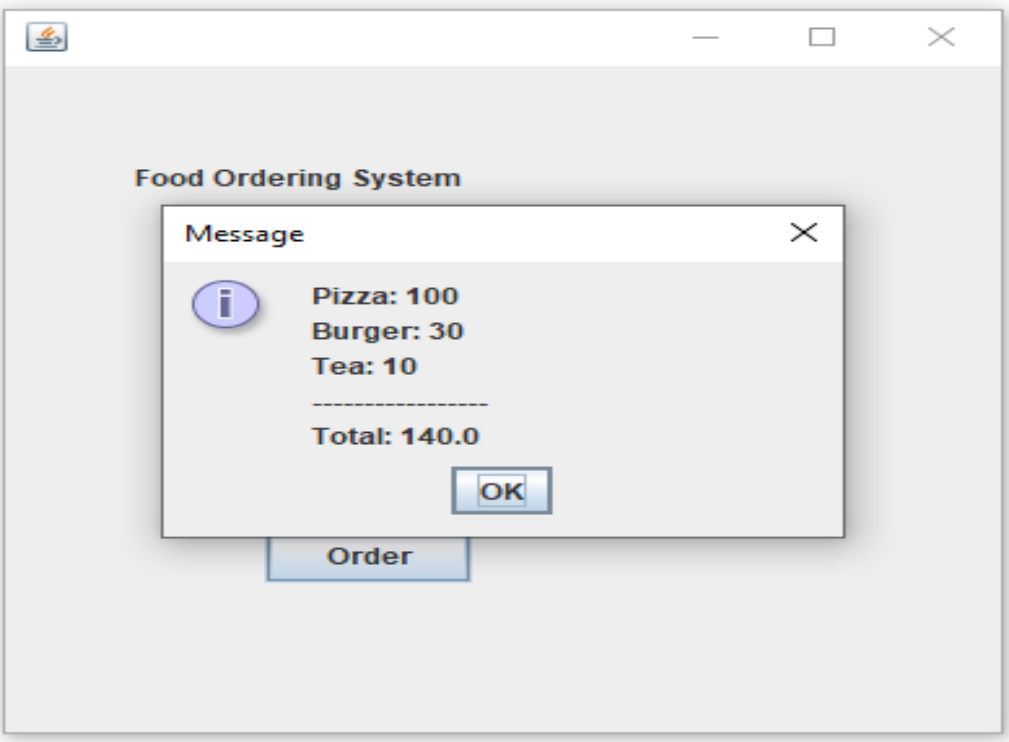
2. Write a Java swings program to demonstrate JCheckBox with action listener.

```
import javax.swing.*;
import java.awt.event.*;
public class CheckBoxExample extends JFrame implements ActionListener{
   JLabel l;
   JCheckBox cb1,cb2,cb3;
   JButton b;
   CheckBoxExample(){
      l=new JLabel("Food Ordering System");
      l.setBounds(50,50,300,20);
      cb1=new JCheckBox("Pizza @ 100");
      cb1.setBounds(100,100,150,20);
      cb2=new JCheckBox("Burger @ 30");
      cb2.setBounds(100,150,150,20);
      cb3=new JCheckBox("Tea @ 10");
      cb3.setBounds(100,200,150,20);
      b=new JButton("Order");
      b.setBounds(100,250,80,30);
      b.addActionListener(this);
      add(l);add(cb1);add(cb2);add(cb3);add(b);
      setSize(400,400);
      setLayout(null);
      setVisible(true);
      setDefaultCloseOperation(EXIT_ON_CLOSE);
   }
   public void actionPerformed(ActionEvent e){
      float amount=0;
      String msg="";
      if(cb1.isSelected()){
         amount+=100;
         msg="Pizza: 100\n";
      }
      if(cb2.isSelected()){
         amount+=30;
         msg+="Burger: 30\n";
      }
      if(cb3.isSelected()){
         amount+=10;
         msg+="Tea: 10\n";
      }
      msg+="----------------\n";
```

```
        JOptionPane.showMessageDialog(this,msg+"Total: "+amount);
    }
    public static void main(String[] args) {
        new CheckBoxExample();
    }
}
```

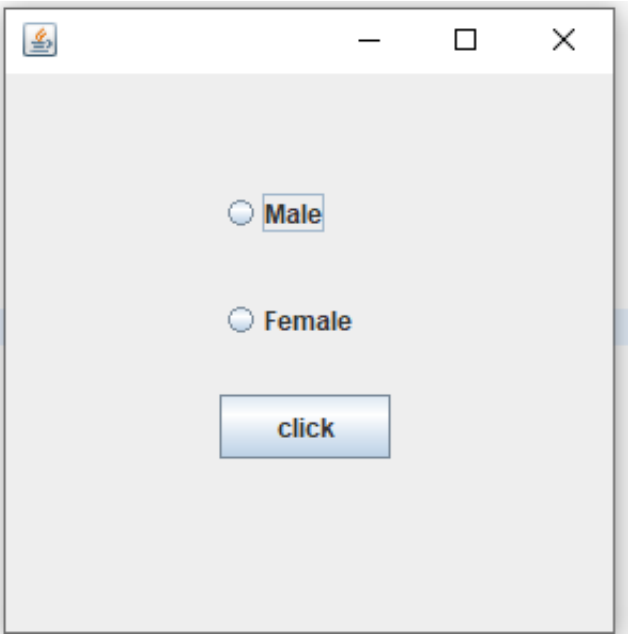
Output:

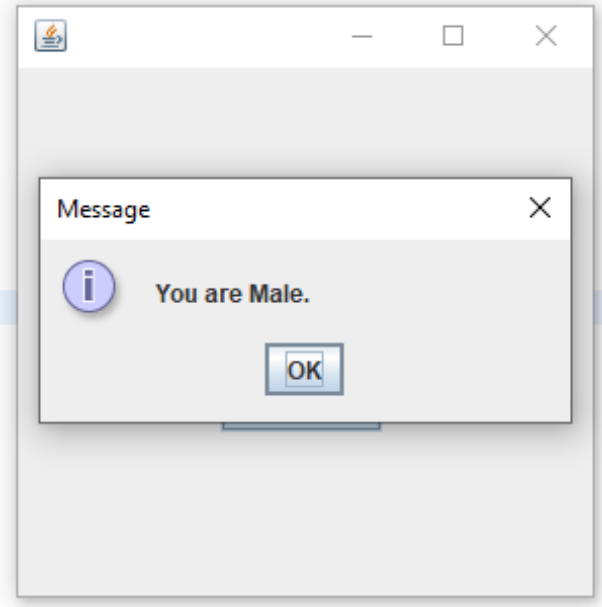


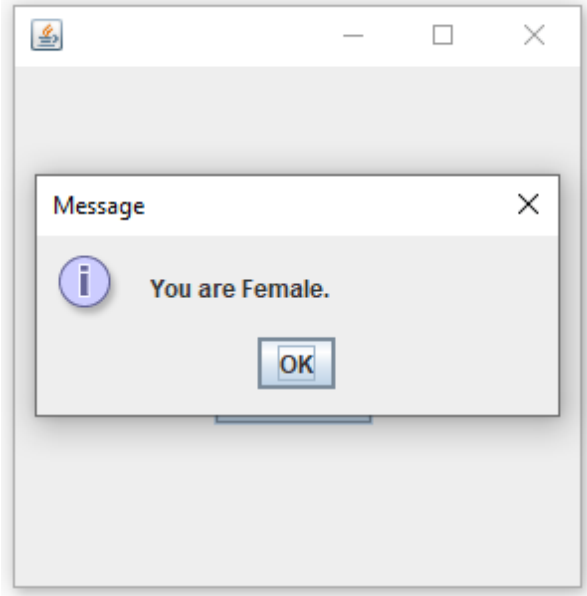


3. Write a Java swings program to demonstrate JRadioButton with action listener.

```
import javax.swing.*;
import java.awt.event.*;
class RadioButtonExample extends JFrame implements ActionListener{
JRadioButton rb1,rb2;
JButton b;
RadioButtonExample(){
rb1=new JRadioButton("Male");
rb1.setBounds(100,50,100,30);
rb2=new JRadioButton("Female");
rb2.setBounds(100,100,100,30);
ButtonGroup bg=new ButtonGroup();
bg.add(rb1);bg.add(rb2);
b=new JButton("click");
b.setBounds(100,150,80,30);
b.addActionListener(this);
add(rb1);add(rb2);add(b);
setSize(300,300);
setLayout(null);
setVisible(true);
}
public void actionPerformed(ActionEvent e){
if(rb1.isSelected()){
JOptionPane.showMessageDialog(this,"You are Male.");
}
if(rb2.isSelected()){
JOptionPane.showMessageDialog(this,"You are Female.");
}
}
public static void main(String args[]){
new RadioButtonExample();
}
}
```

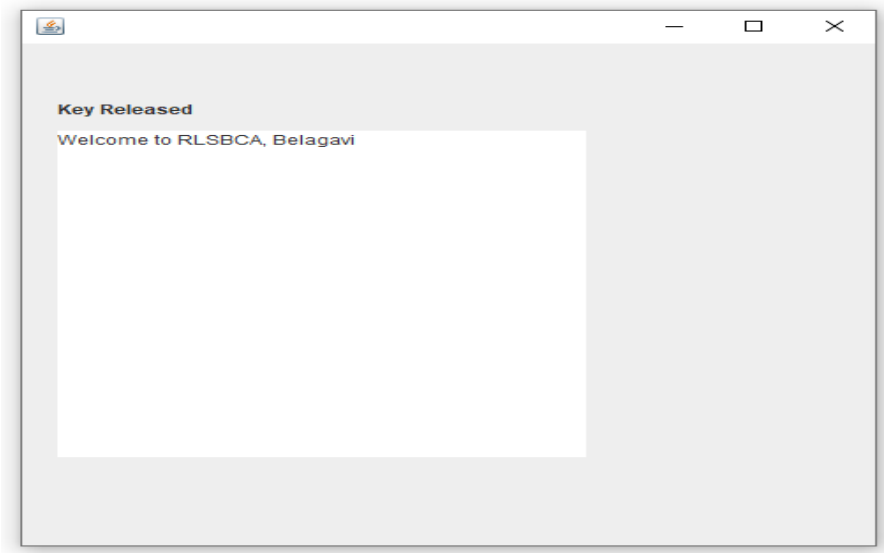

Male
Female
click


Message
You are Male.
OK


Message
You are Female.
OK

4. Write a Java swings program to demonstrate key board handling events.

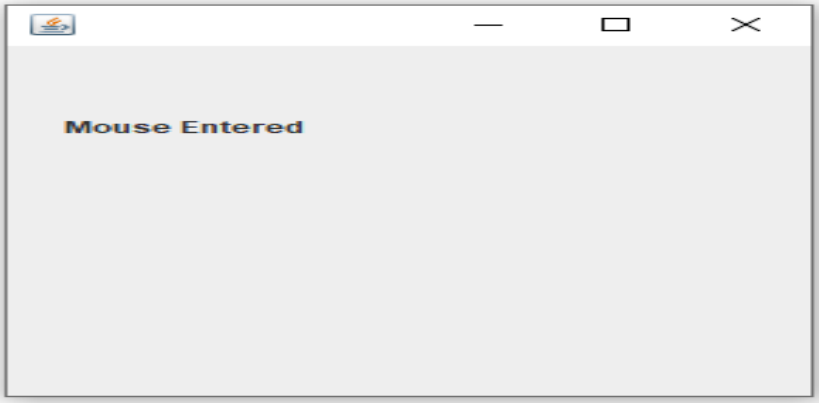
```
import javax.swing.*;
import java.awt.event.*;
public class KeyListenerExample extends JFrame implements KeyListener {
 JLabel l;
    JTextArea area;
    KeyListenerExample() {
        l = new JLabel();
        l.setBounds (20, 50, 100, 20);
        area = new JTextArea();
        area.setBounds (20, 80, 300, 300);
        area.addKeyListener(this);
        add(l);
add(area);
        setSize (500, 500);
        setLayout (null);
        setVisible (true);
    }
    public void keyPressed (KeyEvent e) {
        l.setText ("Key Pressed");
    }
    public void keyReleased (KeyEvent e) {
        l.setText ("Key Released");
    }
    public void keyTyped (KeyEvent e) {
        l.setText ("Key Typed");
    }
    public static void main(String[] args) {
        new KeyListenerExample();
    }
}
```



5. Write a Java swings program to demonstrate mouse handling events.

```
import javax.swing.*;
import java.awt.event.*;
public class MouseListenerExample extends JFrame implements
    MouseListener{
   JLabel l;
   MouseListenerExample(){
      addMouseListener(this);

      l=new JLabel();
      l.setBounds(20,50,100,20);
      add(l);
      setSize(300,300);
      setLayout(null);
      setVisible(true);
   }
   public void mouseClicked(MouseEvent e) {
      l.setText("Mouse Clicked");
   }
   public void mouseEntered(MouseEvent e) {
      l.setText("Mouse Entered");
   }
   public void mouseExited(MouseEvent e) {
      l.setText("Mouse Exited");
   }
   public void mousePressed(MouseEvent e) {
      l.setText("Mouse Pressed");
   }
   public void mouseReleased(MouseEvent e) {
```

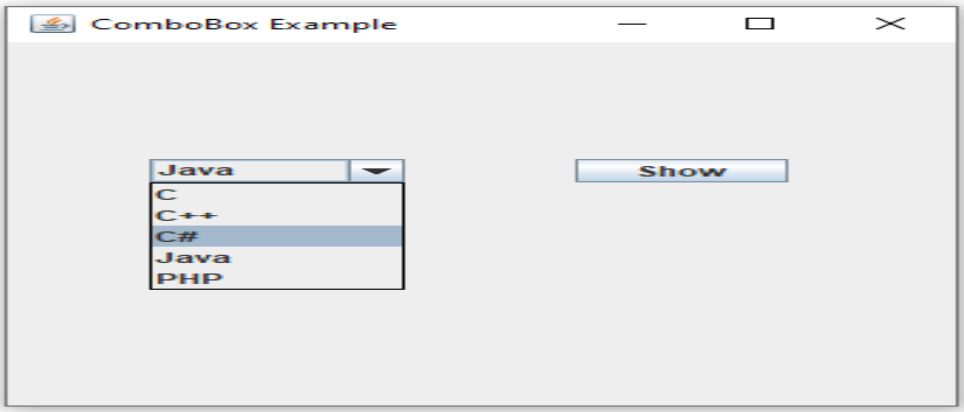
```
        l.setText("Mouse Released");
    }
public static void main(String[] args) {
    new MouseListenerExample();
}
}
```

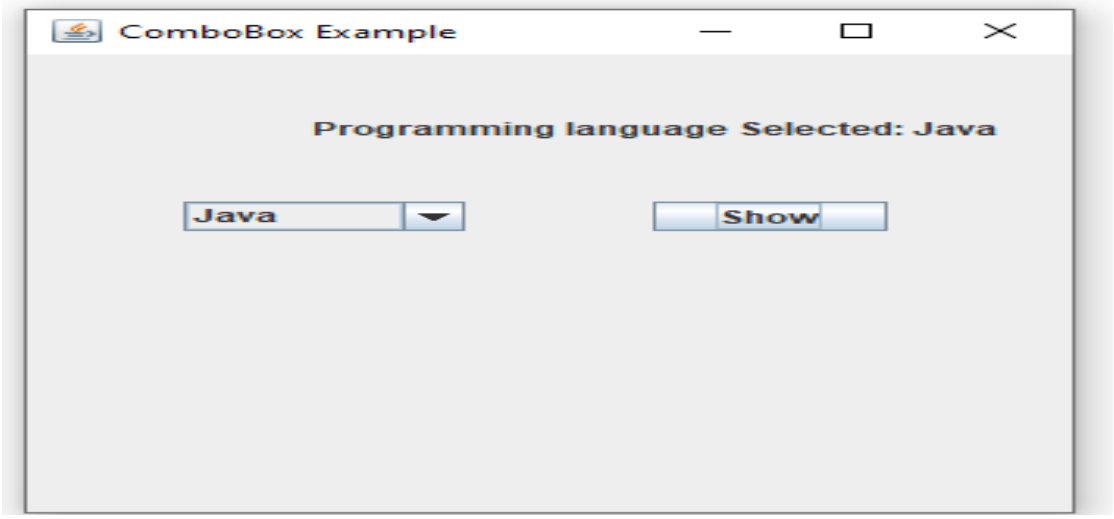


6. Write a Java swings program to demonstrate JComboBox with action listener.

```
import javax.swing.*;
import java.awt.event.*;
public class ComboBoxExample {
JFrame f;
ComboBoxExample(){
    f=new JFrame("ComboBox Example");
    final JLabel label = new JLabel();
    label.setHorizontalAlignment(JLabel.CENTER);
    label.setSize(400,100);
    JButton b=new JButton("Show");
    b.setBounds(200,100,75,20);
    String languages[]={"C","C++","C#","Java","PHP"};
    final JComboBox cb=new JComboBox(languages);
    cb.setBounds(50, 100,90,20);
    f.add(cb); f.add(label); f.add(b);
    f.setLayout(null);
    f.setSize(350,350);
    f.setVisible(true);
    b.addActionListener(new ActionListener() {

 public void actionPerformed(ActionEvent e)
```

```
{
String data = "Programming language Selected: "
   + cb.getItemAt(cb.getSelectedIndex());
label.setText(data);
}
});
}
public static void main(String[] args) {
    new ComboBoxExample();
}
}
```

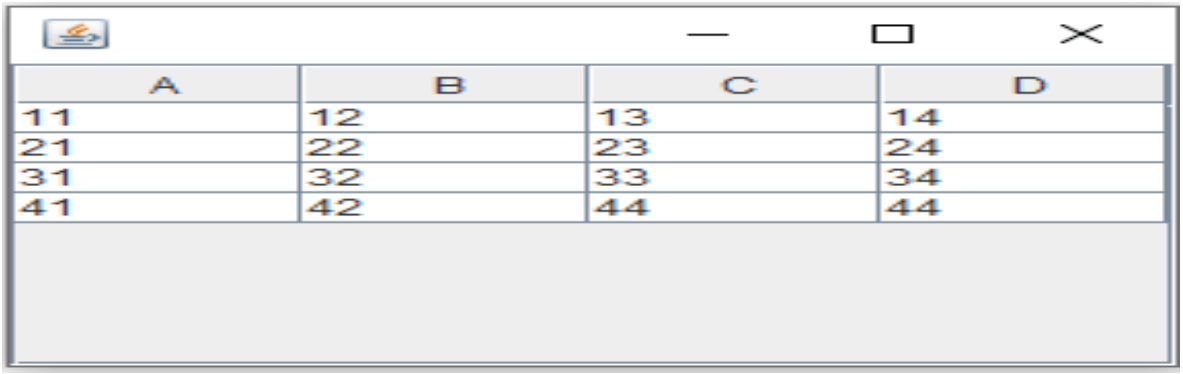




7. Write a Java swings program to demonstrate JTable.

```
import javax.swing.*;

public class JtableEx {

  public static void main(String[] a) {
    JFrame frame = new JFrame();
    final JTable table;
    String[] columnTitles = { "A", "B", "C", "D" };
    Object[][] rowData = { { "11", "12", "13", "14" }, { "21", "22", "23", "24" },
        { "31", "32", "33", "34" }, { "41", "42", "44", "44" } };
    table = new JTable(rowData, columnTitles);
frame.add(new JScrollPane(table));
frame.setSize(300, 200);
frame.setVisible(true);
  }
}
```

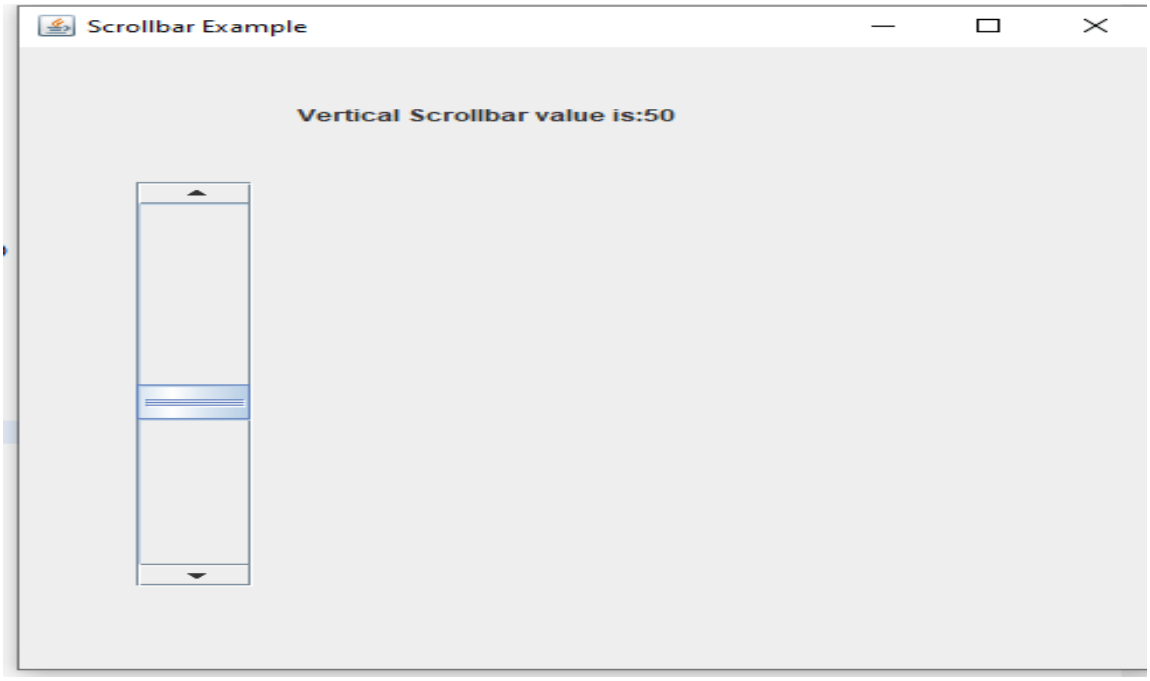
Output:



A	B	C	D
11	12	13	14
21	22	23	24
31	32	33	34
41	42	44	44

8. Write a Java swings program to demonstrate JScrollBar with adjustment listener.

```
import javax.swing.*;
import java.awt.event.*;
class scrollex
{
scrollex(){
JFrame f= new JFrame("Scrollbar Example");
final JLabel label = new JLabel();
label.setHorizontalAlignment(JLabel.CENTER);
label.setSize(400,100);
final JScrollBar s=new JScrollBar();
s.setBounds(50,100, 50,300);
f.add(s); f.add(label);
f.setSize(500,500);
f.setLayout(null);
f.setVisible(true);
s.addAdjustmentListener(new AdjustmentListener() {
public void adjustmentValueChanged(AdjustmentEvent e) {
label.setText("Vertical Scrollbar value is:"+ s.getValue());
    }
 });
}
public static void main(String args[])
{
new scrollex();
}}
```



9. Write a JDBC Program to perform following operations

a. Creation of database

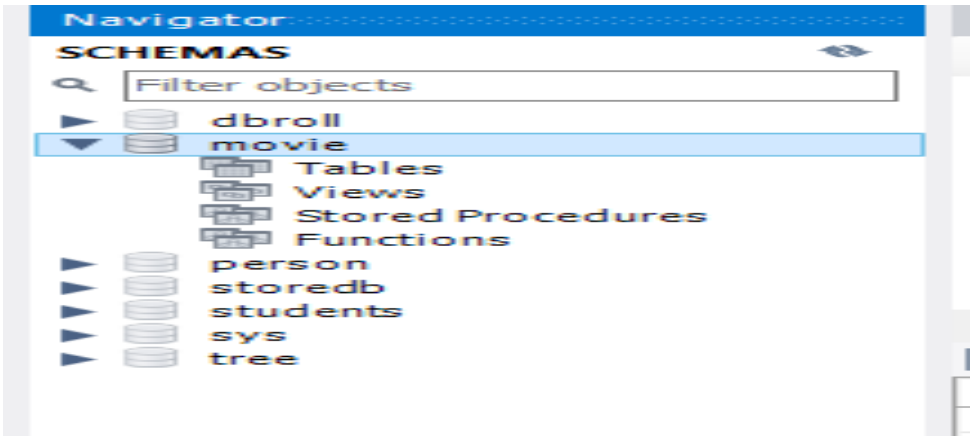
b. Creation of table

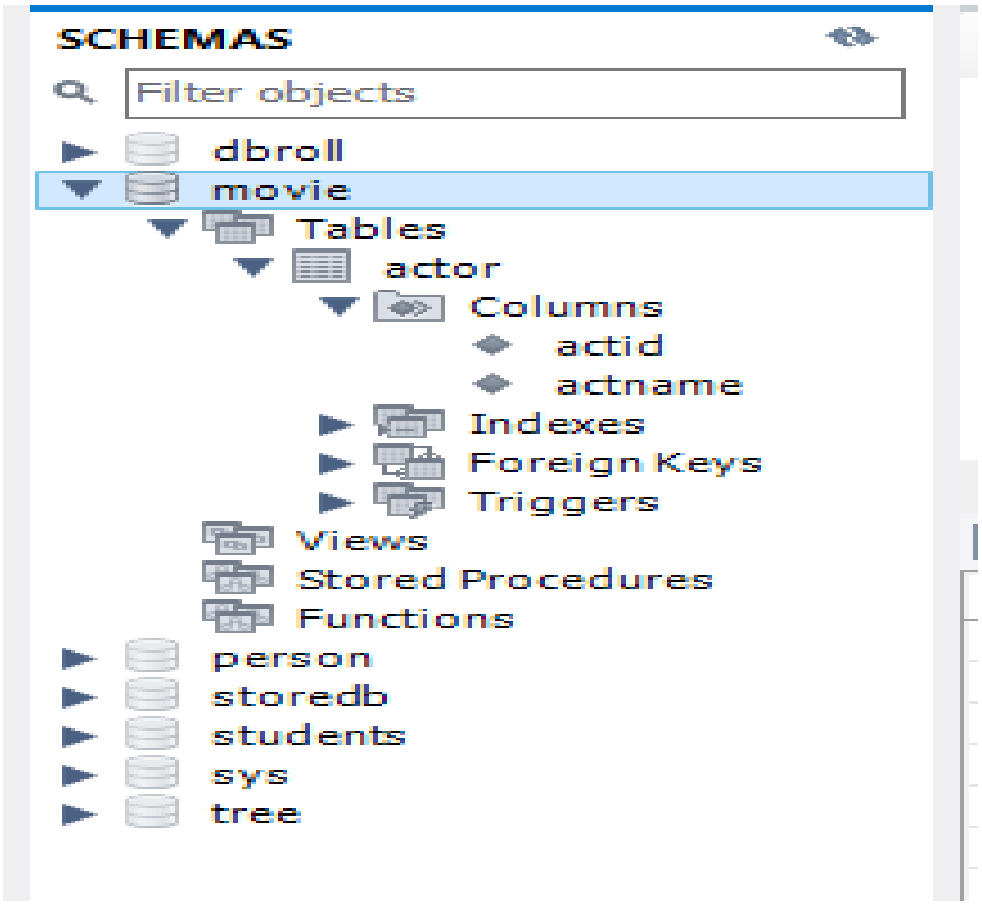
c. Insertion of 5 values to the table

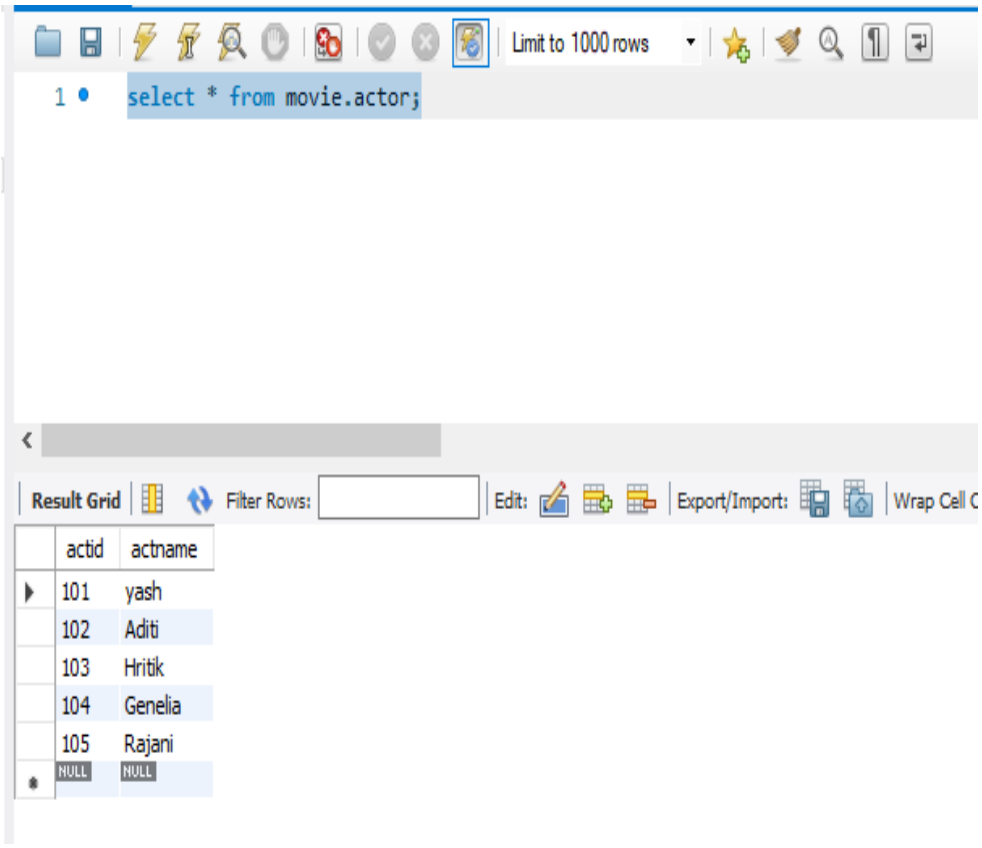
```
import java.sql.*;
public class dbcreation
{
        public static void main(String args[]) throws Exception
        {
Connection conn=null;
Statement stmt=null;
Class.forName("com.mysql.jdbc.Driver");
conn =
DriverManager.getConnection("jdbc:mysql://localhost:3306/movie","root",
"root");
   stmt = conn.createStatement();
    //String sql = "create database movie";
   //String sql = "create table actor(actid int primary key,actname varchar(20))";
   //String sql = "insert into actor values(101,'Yash')";
   String sql1 = "insert into actor values(102,'Aditi')";
   String sql2 = "insert into actor values(103,'Hritik')";
   String sql3 = "insert into actor values(104,'Genelia')";
   String sql4 = "insert into actor values(105,'Rajani')";
 //  stmt.executeUpdate(sql);
   stmt.executeUpdate(sql1);
   stmt.executeUpdate(sql2);
   stmt.executeUpdate(sql3);
   stmt.executeUpdate(sql4);
   System.out.println("Successfully Done");
   stmt.close();
   conn.close();
        }
}
```

Output:

```
Successfully Done
```


Navigator
SCHEMAS
Filter objects
dbroll
movie
Tables
Views
Stored Procedures
Functions
person
storedb
students
sys
tree


SCHEMAS
Filter objects
dbroll
movie
Tables
actor
Columns
actid
actname
Indexes
Foreign Keys
Triggers
Views
Stored Procedures
Functions
person
storedb
students
sys
tree



actid	actname
101	yash
102	Aditi
103	Hritik
104	Genelia
105	Rajani
NULL	NULL

10. Write a JDBC program to demonstrate Insertion and Deletion Operation.

Backend Code:

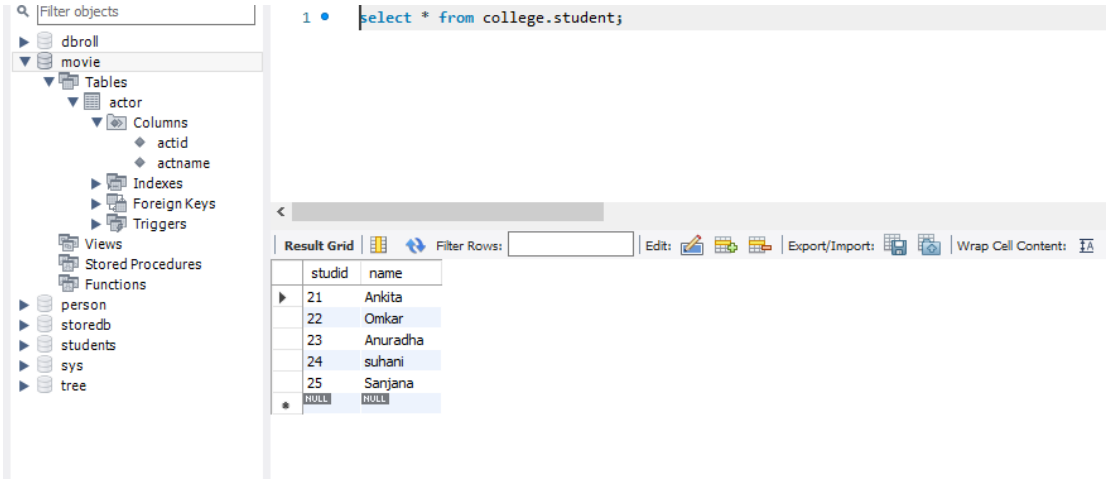
```
create database college;
use college;
create table student(studid int primary key,name varchar(20));
```

Frontend Code:

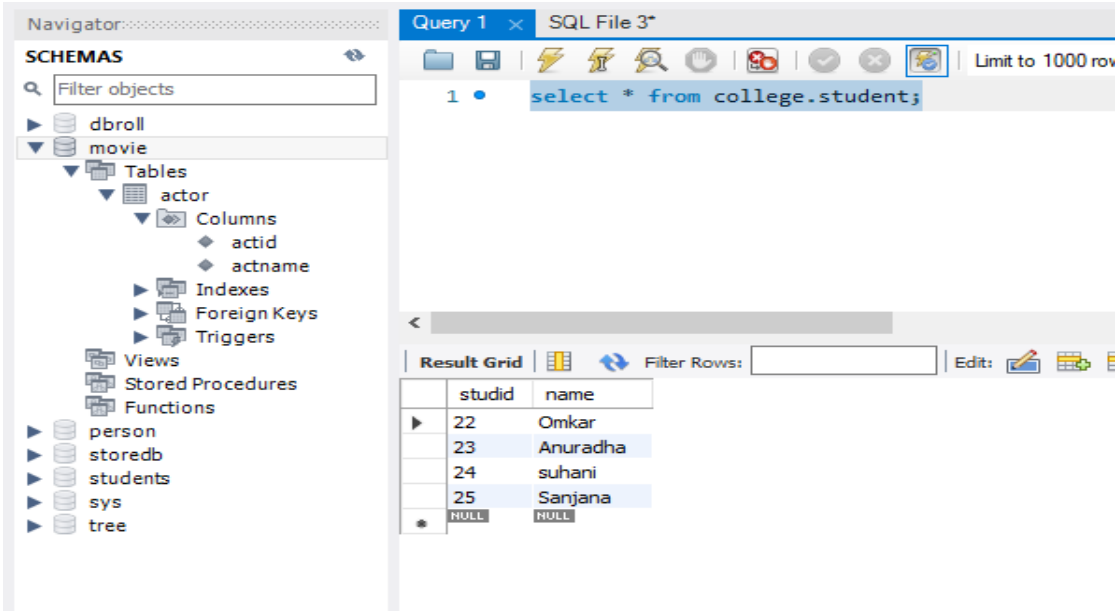
```
import java.sql.*;
public class dbcreation
{
        public static void main(String args[]) throws Exception
        {
Connection conn=null;
Statement stmt=null;
Class.forName("com.mysql.jdbc.Driver");
conn =
DriverManager.getConnection("jdbc:mysql://localhost:3306/college","root",
"root");
   stmt = conn.createStatement();

  // String sql = "insert into student values(21,'Ankita')";
   //String sql1 = "insert into student values(22,'Omkar')";
   //String sql2 = "insert into student values(23,'Anuradha')";
   //String sql3 = "insert into student values(24,'suhani')";
   //String sql4 = "insert into student values(25,'Sanjana')";
  //stmt.executeUpdate(sql);
   //stmt.executeUpdate(sql1);
   //stmt.executeUpdate(sql2);
   //stmt.executeUpdate(sql3);
  // stmt.executeUpdate(sql4);
   String del="delete from student where studid=21";
   stmt.executeUpdate(del);
   System.out.println("Successfully Done");
   stmt.close();
   conn.close();
        }
}
```

Output:

```
Successfully Done
```



Successfully Done



Record deleted from backend.

11. Write a JDBC program to demonstrate Insert and Update Operation.

Backend Code:

```
create database insurance;
use insurance;
create table car(regno varchar(20),ownername varchar(25));
```

Front End Code:

```
import java.sql.*;
public class dbcreation
{
        public static void main(String args[]) throws Exception
        {
Connection conn=null;
Statement stmt=null;
Class.forName("com.mysql.jdbc.Driver");
conn =
DriverManager.getConnection("jdbc:mysql://localhost:3306/insurance","root",
"root");
   stmt = conn.createStatement();

  // String sql = "insert into car values('ka22a1234','Ankita')";
    //String sql1 = "insert into car values('ka23a1234','Omkar')";
   // String sql2 = "insert into car values('ka24a1234','Anuradha')";
   // String sql3 = "insert into car values('ka25a1234','suhani')";
   // String sql4 = "insert into car values('ka26a1234','Sanjana')";
  // stmt.executeUpdate(sql);
   // stmt.executeUpdate(sql1);
  //  stmt.executeUpdate(sql2);
   // stmt.executeUpdate(sql3);
   //stmt.executeUpdate(sql4);
   String update="update car set ownername='Bhagya' where
regno='ka22a1234'";
   stmt.executeUpdate(update);
    System.out.println("Successfully Done");
    stmt.close();
    conn.close();
        }
  }
```

Output:
select * from insurance.car;

ka22a1234	Ankita
ka23a1234	Omkar
ka24a1234	Anuradha
ka25a1234	suhani
ka26a1234	Sanjana

select * from insurance.car;

ka22a1234	Bhagya
ka23a1234	Omkar
ka24a1234	Anuradha
ka25a1234	suhani
ka26a1234	Sanjana

12. Write a JDBC program to demonstrate fetch the values from backend to frontend.

Backend Code:

```
create database company;
use company;
create table employee(empid int,empname varchar(20),salary int);
insert into employee values(1001,'Pallavi',45000);
insert into employee values(1002,'Bhagya',55000);
insert into employee values(1003,'Aditi',25000);
insert into employee values(1004,'Nisha',65000);
insert into employee values(1005,'Sahana',95000);
```

Frontend Code:

```
import java.sql.*;
public class dbcreation
{
        public static void main(String args[]) throws Exception
        {
Connection conn=null;
Statement stmt=null;
Class.forName("com.mysql.jdbc.Driver");
conn =
DriverManager.getConnection("jdbc:mysql://localhost:3306/company","root",
"root");
   stmt = conn.createStatement();

ResultSet rs=stmt.executeQuery("Select * from employee");
while(rs.next())
{
        System.out.println("Empid:"+rs.getString(1));
        System.out.println("Emp Name:"+rs.getString(2));
        System.out.println("Emp Salary:"+rs.getString(3));
}

   System.out.println("Successfully Done");
   stmt.close();
   conn.close();
        }
}
```

Output:

Empid:1001
Emp Name:Pallavi
Emp Salary:45000
Empid:1002
Emp Name:Bhagya
Emp Salary:55000
Empid:1003
Emp Name:Aditi
Emp Salary:25000
Empid:1004
Emp Name:Nisha
Emp Salary:65000
Empid:1005
Emp Name:Sahana
Emp Salary:95000
Successfully Done

Servlet Programs:

13. Write a Java servlet program to demonstrate customized sendRedirect()

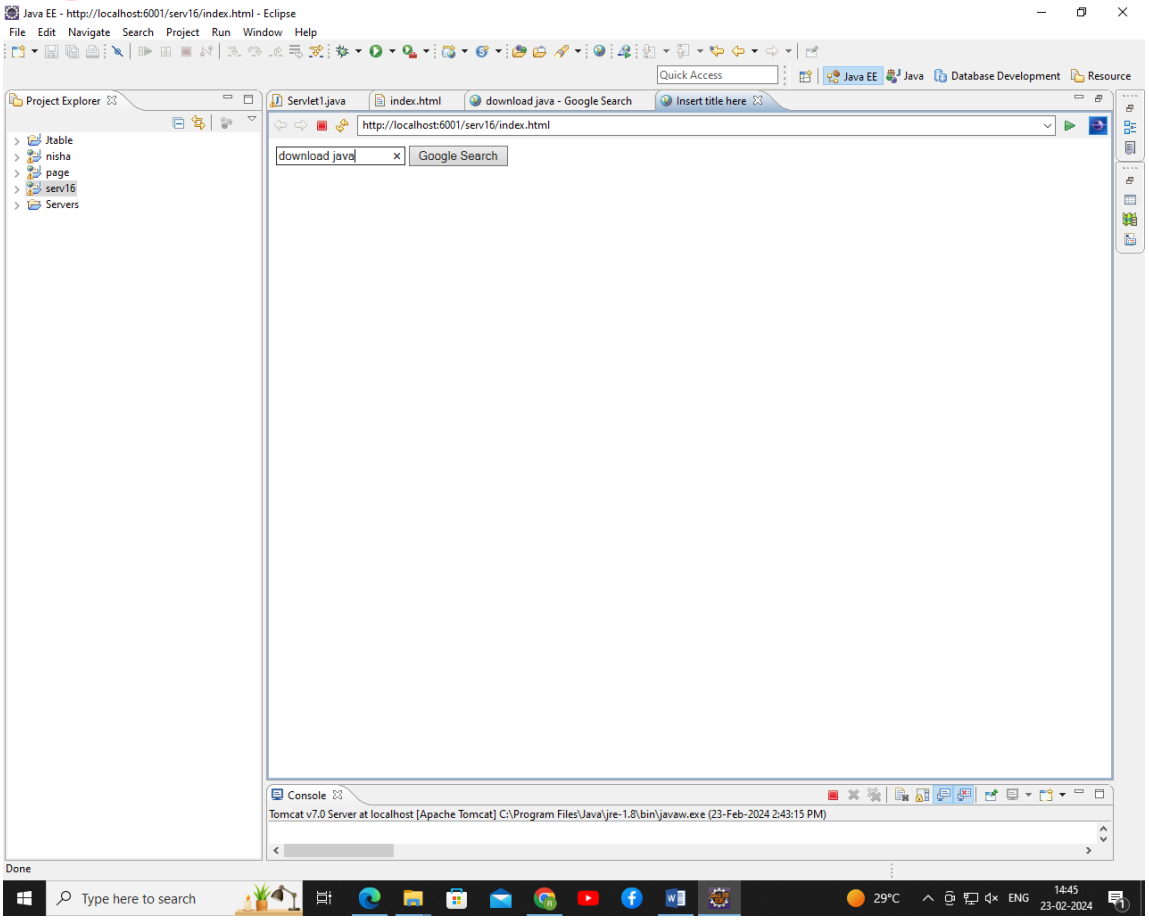
Index.html:

```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<form action="Servlet1">
<input type="text" name="name">
<input type="submit" value="Google Search">
</form>
</body>
 </html>
```

Servlet1.java

```
import java.io.IOException;
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("/Servlet1")
public class Servlet1 extends HttpServlet {

protected void doGet(HttpServletRequest request, HttpServletResponse
response)
throws ServletException, IOException
{
 String name=request.getParameter("name");
 response.sendRedirect("https://www.google.com/search?q="+name);
}
}
```

Output:


Java EE - http://localhost:6001/serv16/index.html - Eclipse
File Edit Navigate Search Project Run Window Help
Quick Access
Java EE
Java
Database Development
Resource
Project Explorer
Jtable
nisha
page
serv16
Servers
Servlet1.java
index.html
download java - Google Search
Insert title here
http://localhost:6001/serv16/index.html
download java
Google Search
Console
Tomcat v7.0 Server at localhost [Apache Tomcat] C:\Program Files\Java\jre-1.8\bin\javaw.exe (23-Feb-2024 2:43:15 PM)
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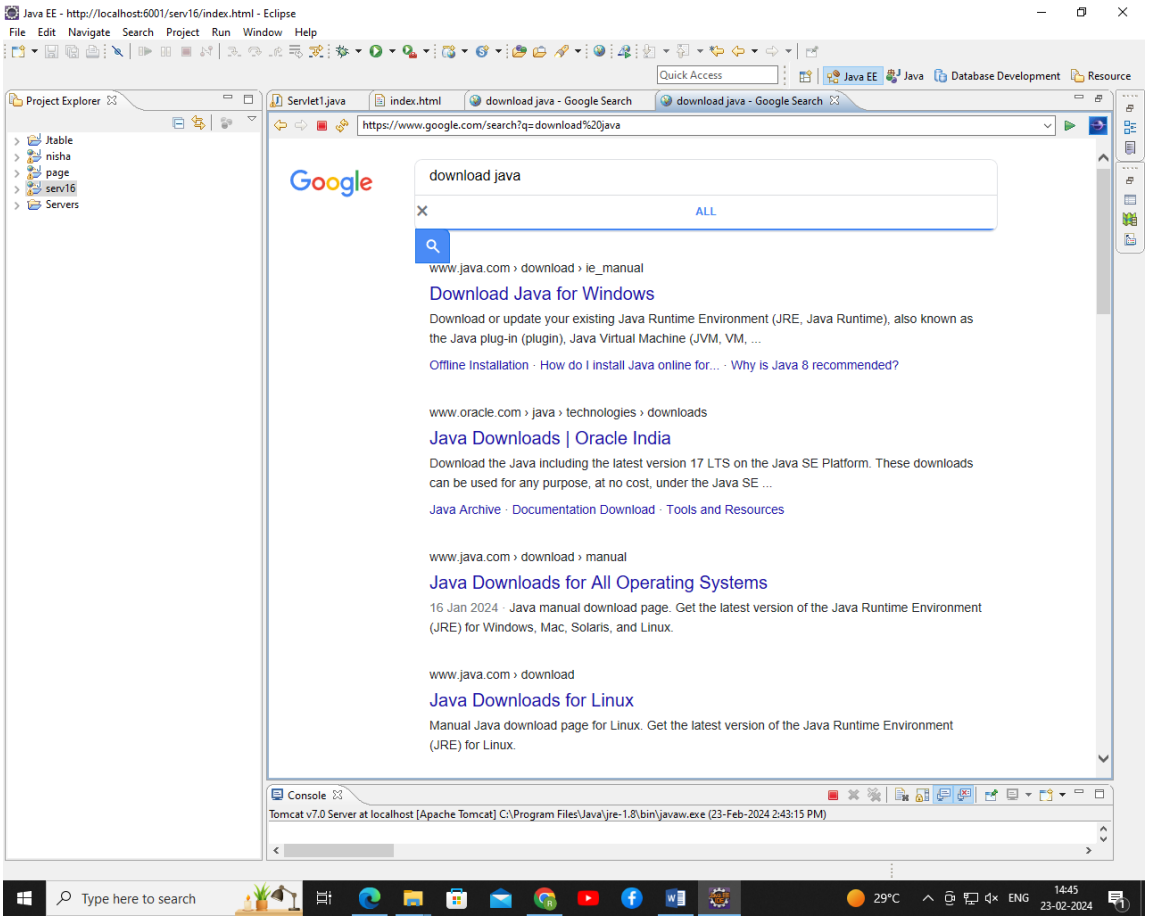
29°C
ENG
14:45
23-02-2024


Java EE - http://localhost:6001/serv16/index.html - Eclipse
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Project Explorer
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nisha
page
serv16
Servers
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Console
Tomcat v7.0 Server at localhost [Apache Tomcat] C:\Program Files\Java\jre-1.8\bin\javaw.exe (23-Feb-2024 2:43:15 PM)
Type here to search
29°C
ENG
14:45
23-02-2024

13. Write a Java servlet program to demonstrate form processing (Login Form).

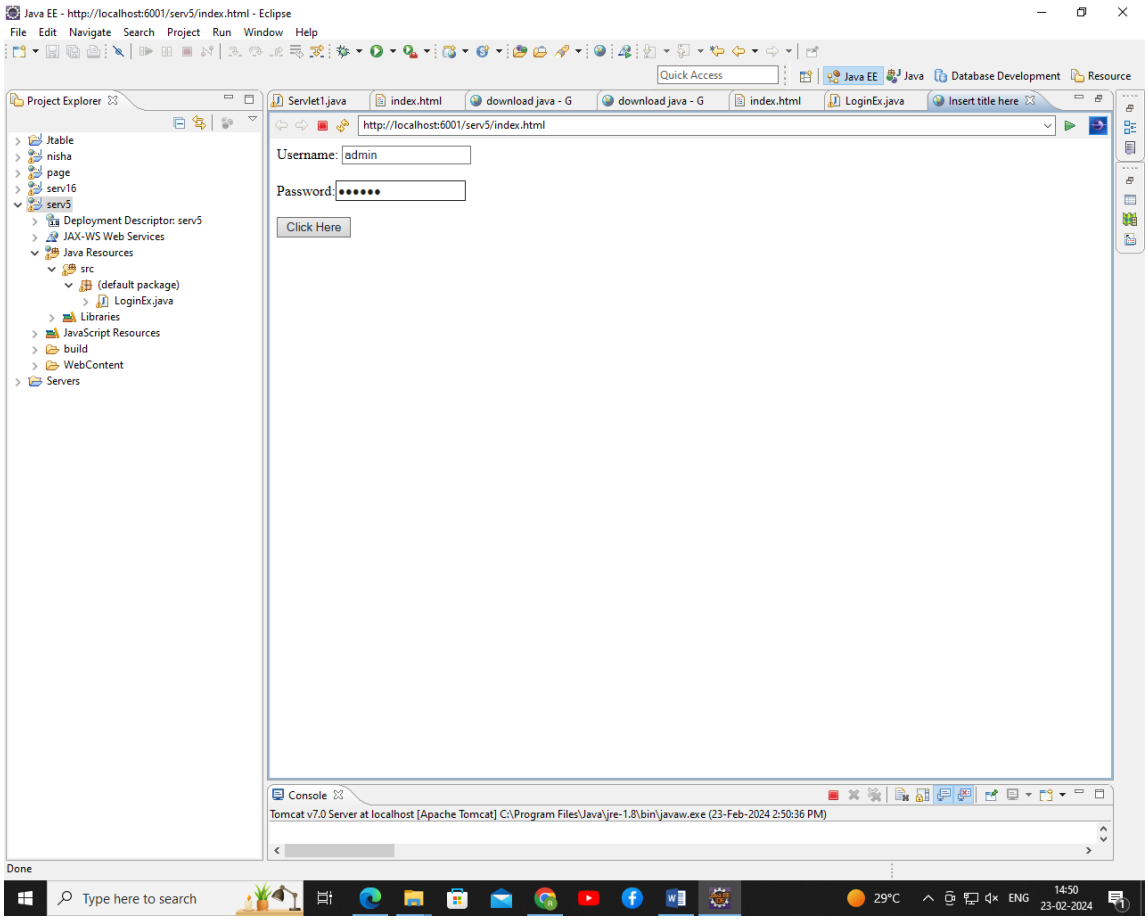
Index.html

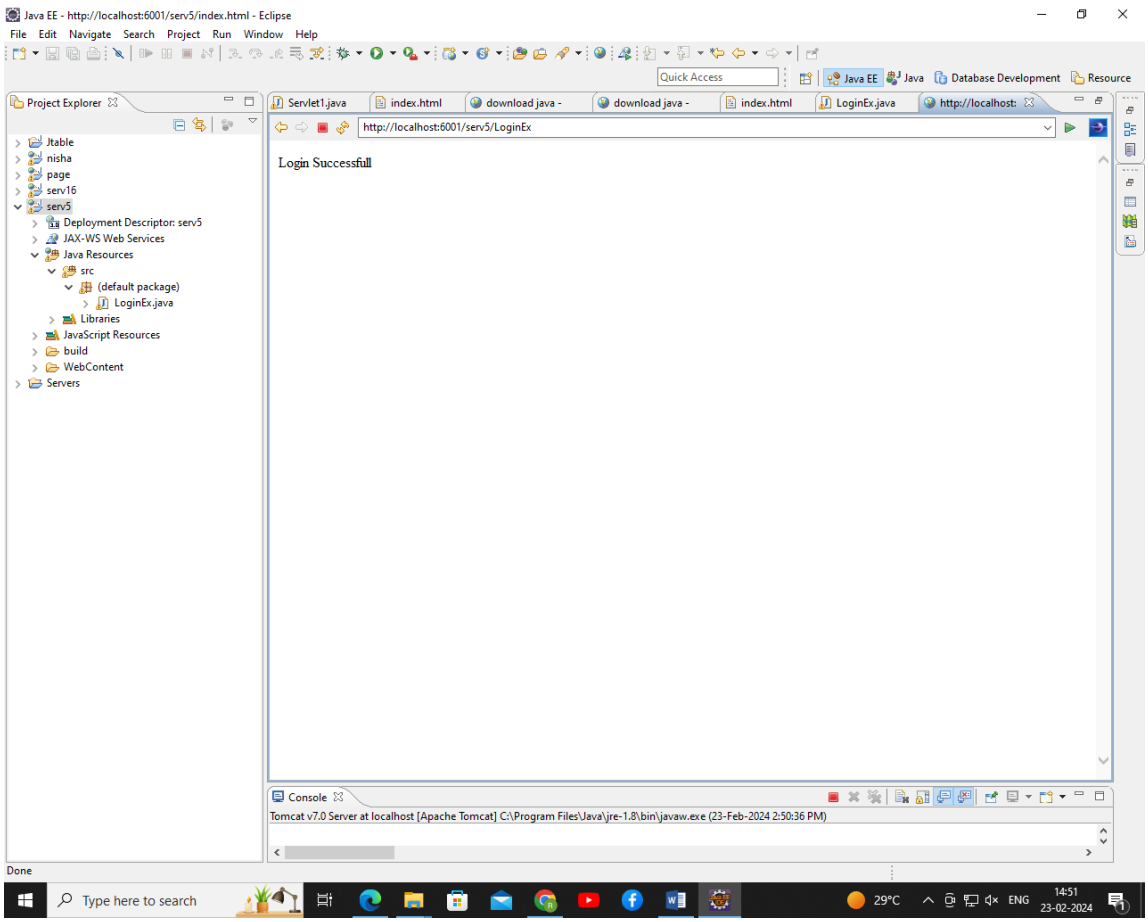
```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<form action="LoginEx" method="post">
Username: <input type="text" name="username"/>
<br/>
<br/>
Password:<input type="password" name="password"/>
<br/>
<br/>
<input type="submit" value="Click Here"/>
</form>
</body>
</html>
```

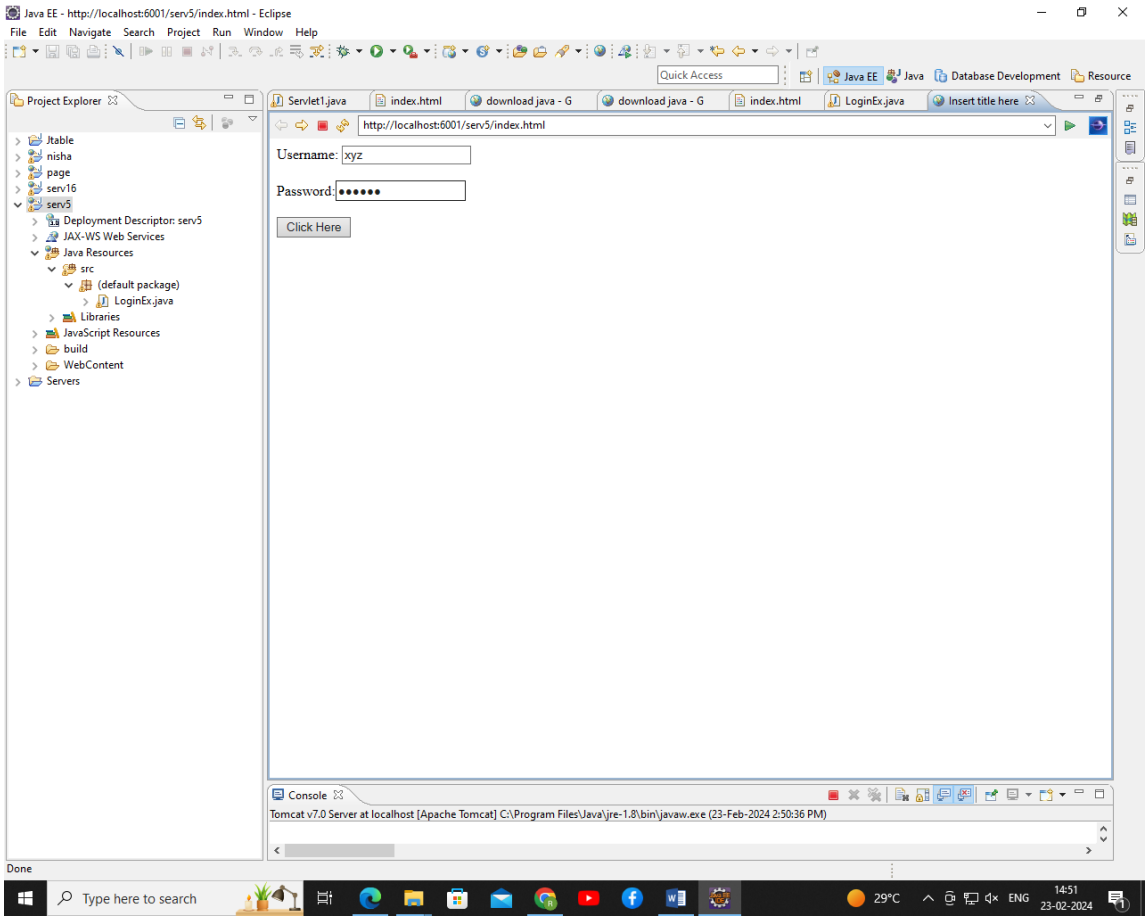
Loginex.java:

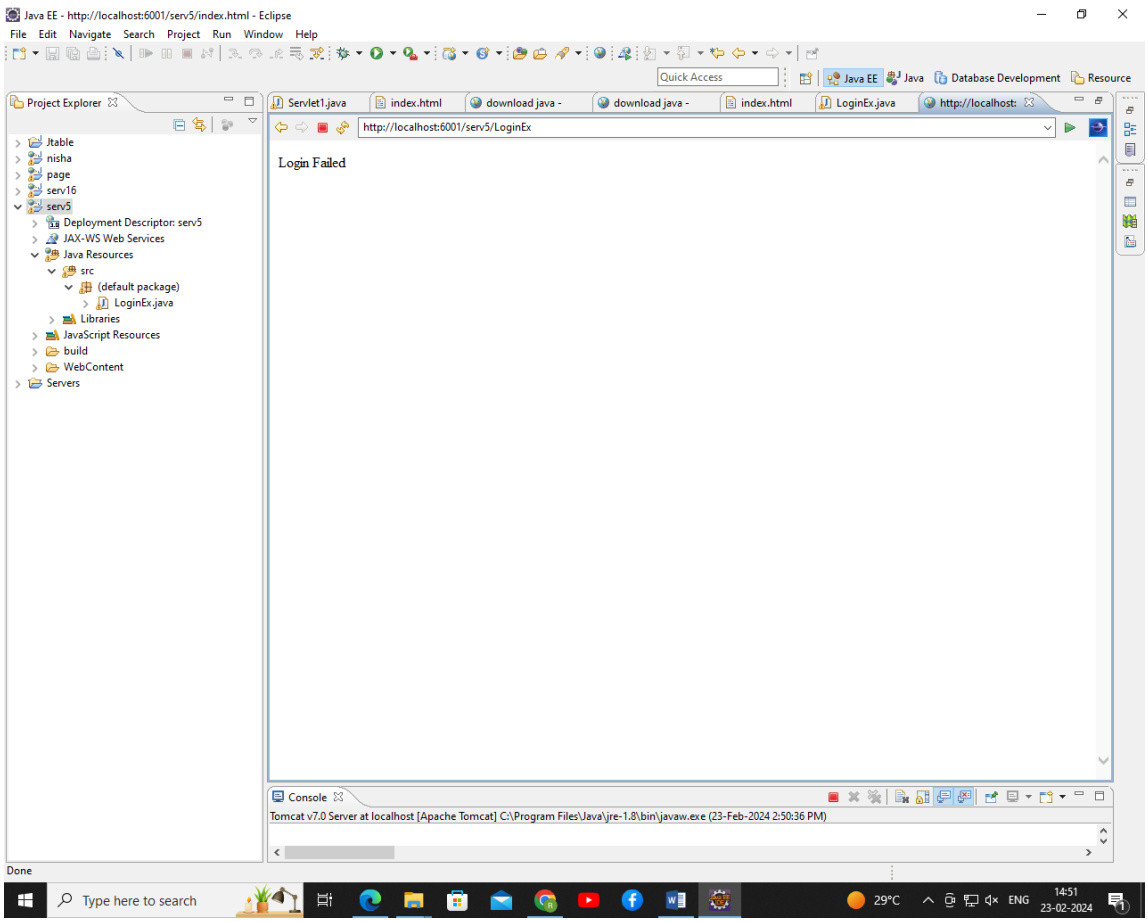
```
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@WebServlet("/LoginEx")
public class LoginEx extends HttpServlet {
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
throws ServletException, IOException {
PrintWriter pw=response.getWriter();
response.setContentType("text/html");
String user=request.getParameter("username");
String pass=request.getParameter("password");
if(user.equals("admin")&&pass.equals("rlsbca"))
 pw.println("Login Successfull");
 else
 pw.println("Login Failed");
```

```
pw.close();
}
 }
```


Java EE - http://localhost:6001/serv5/index.html - Eclipse
File Edit Navigate Search Project Run Window Help
Project Explorer
Servlet1.java
index.html
download java - G
download java - G
index.html
LoginEx.java
Insert title here
http://localhost:6001/serv5/index.html
Username: admin
Password: ••••••
Click Here
Console
Tomcat v7.0 Server at localhost [Apache Tomcat] C:\Program Files\Java\jre-1.8\bin\javaw.exe (23-Feb-2024 2:50:36 PM)
Done
Type here to search
29°C
ENG
14:50
23-02-2024


Java EE - http://localhost:6001/serv5/index.html - Eclipse
File Edit Navigate Search Project Run Window Help
Project Explorer
Servlet1.java
index.html
download java -
download java -
index.html
LoginEx.java
http://localhost:
http://localhost:6001/serv5/LoginEx
Login Successfull
Console
Tomcat v7.0 Server at localhost [Apache Tomcat] C:\Program Files\Java\jre-1.8\bin\javaw.exe (23-Feb-2024 2:50:36 PM)
Done
Type here to search
29°C
ENG
14:51
23-02-2024


Java EE - http://localhost:6001/serv5/index.html - Eclipse
File Edit Navigate Search Project Run Window Help
Project Explorer
Servlet1.java
index.html
download java - G
download java - G
index.html
LoginEx.java
Insert title here
http://localhost:6001/serv5/index.html
Username: xyz
Password: ••••••
Click Here
Console
Tomcat v7.0 Server at localhost [Apache Tomcat] C:\Program Files\Java\jre-1.8\bin\javaw.exe (23-Feb-2024 2:50:36 PM)
Done
Type here to search
29°C
ENG
14:51
23-02-2024

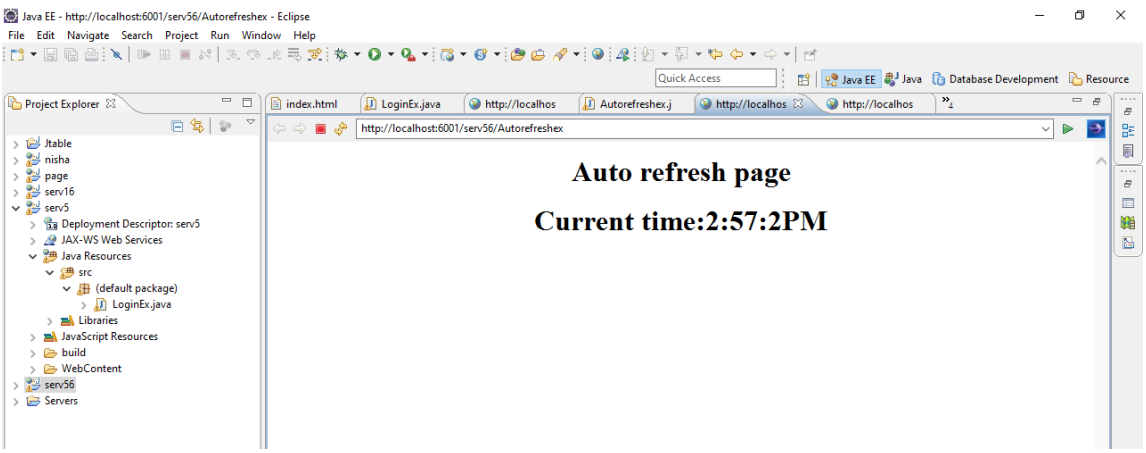

Java EE - http://localhost:6001/serv5/index.html - Eclipse
File Edit Navigate Search Project Run Window Help
Project Explorer
Servlet1.java
index.html
download java -
download java -
index.html
LoginEx.java
http://localhost:
http://localhost:6001/serv5/LoginEx
Login Failed
Console
Tomcat v7.0 Server at localhost [Apache Tomcat] C:\Program Files\Java\jre-1.8\bin\javaw.exe (23-Feb-2024 2:50:36 PM)
Done
Type here to search
29°C
ENG
14:51
23-02-2024

15. Write a Java servlet program to demonstrate auto refresh of a web page

```
import java.io.IOException;
import java.io.PrintWriter;
import java.util.Calendar;
import java.util.GregorianCalendar;
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("/Autorefreshex")
public class Autorefreshex extends HttpServlet {
protected void doGet(HttpServletRequest request, HttpServletResponse
response)
throws ServletException, IOException {
response.setIntHeader("Refresh", 5);
response.setContentType("text/html");
Calendar calendar=new GregorianCalendar();
String am_pm;
int hour=calendar.get(Calendar.HOUR);
int minute=calendar.get(Calendar.MINUTE);
int second=calendar.get(Calendar.SECOND);
if(calendar.get(Calendar.AM_PM)==0)
{
am_pm="AM";
}
else
{
am_pm="PM";
}
String CT=hour+":"+minute+":"+second+""+am_pm;
PrintWriter pw=response.getWriter();
pw.println("<h1 align='center'> Auto refresh page </h1>");
pw.println("<h1 align='center'> Current time:"+CT+"</h1>");
}

}
```

Output:



16. Write a java servlet program to demonstrate session using Httpsession.

Index.html

```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<form action="Ser1" method="post">
<input type="text" name="username"/>
<input type="submit" value="click"/>
</form>
</body>
</html>
```

Ser1.java:

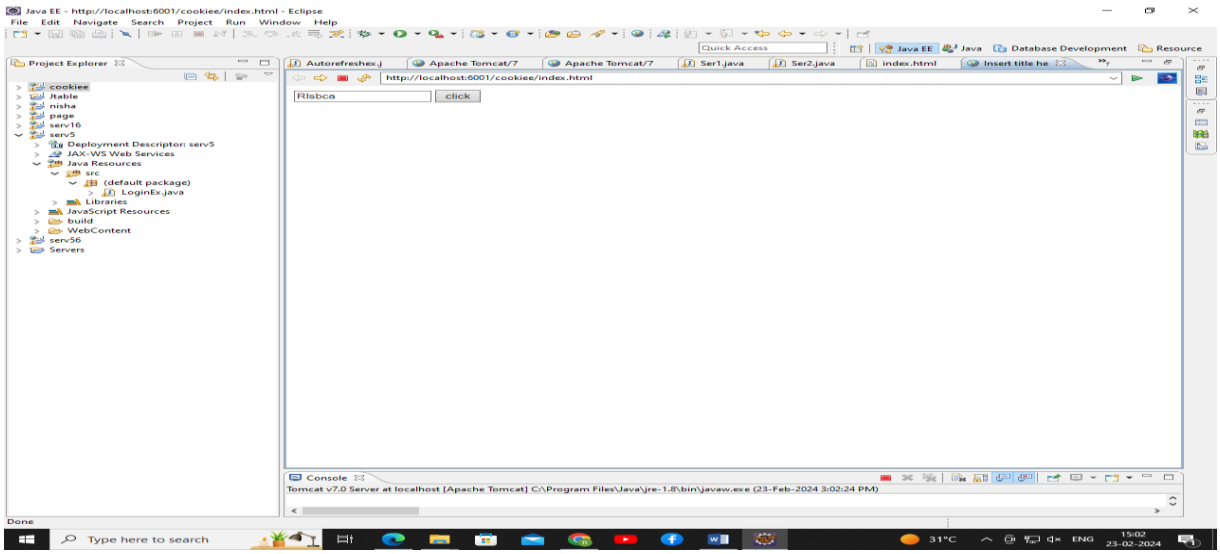
```
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
import java.io.*;
@WebServlet("/Ser1")
public class Ser1 extends HttpServlet {
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
```

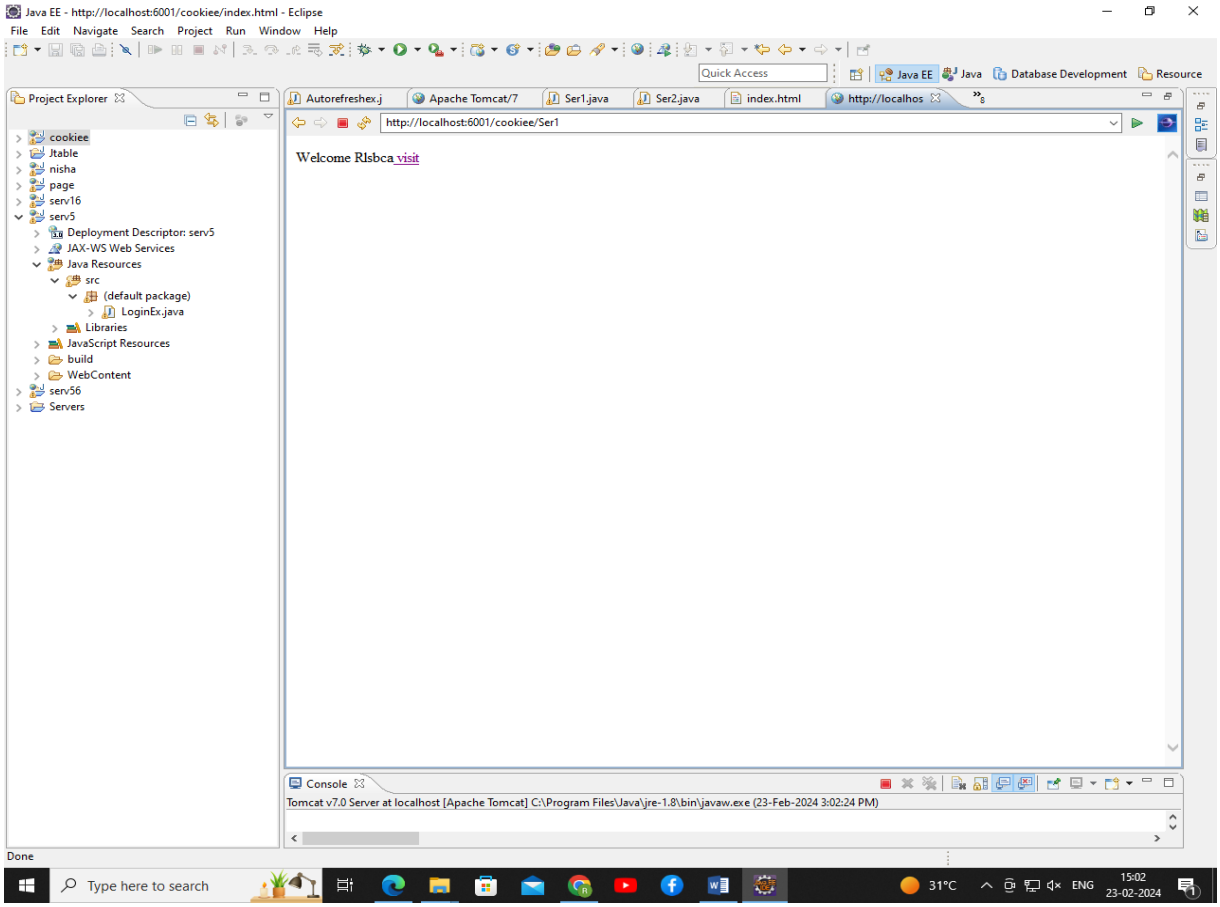
```
throws ServletException, IOException {
response.setContentType("text/html");
PrintWriter pw=response.getWriter();
String n=request.getParameter("username");
pw.print("Welcome "+n);
HttpSession session=request.getSession();
session.setAttribute("uname", n);
pw.print("<a href='Ser2'> visit </a>");
}
}
```

Ser2.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;
import javax.servlet.http.HttpSession;
@WebServlet("/Ser2")
public class Ser2 extends HttpServlet {
protected void doGet(HttpServletRequest request, HttpServletResponse
response)
throws ServletException, IOException {
response.setContentType("text/html");
PrintWriter pw=response.getWriter();
HttpSession session=request.getSession(false);
String n=(String)session.getAttribute("uname");
pw.print("Hello "+n);
}
}
```

Output:


Java EE - http://localhost:6001/cookiee/index.html - Eclipse
File Edit Navigate Search Project Run Window Help
Project Explorer
cookiee
Jtable
nisha
page
serv16
serv5
Deployment Descriptor: serv5
JAX-WS Web Services
Java Resources
src
(default package)
LoginEx.java
Libraries
JavaScript Resources
build
WebContent
serv56
Servers
Autorefreshex.j
Apache Tomcat/7
Apache Tomcat/7
Ser1.java
Ser2.java
index.html
Insert title he
http://localhost:6001/cookiee/index.html
Rlsbca
click
Console
Tomcat v7.0 Server at localhost [Apache Tomcat] C:\Program Files\Java\jre-1.8\bin\javaw.exe (23-Feb-2024 3:02:24 PM)
Done
Type here to search
31°C
ENG
15:02
23-02-2024


Java EE - http://localhost:6001/cookiee/index.html - Eclipse
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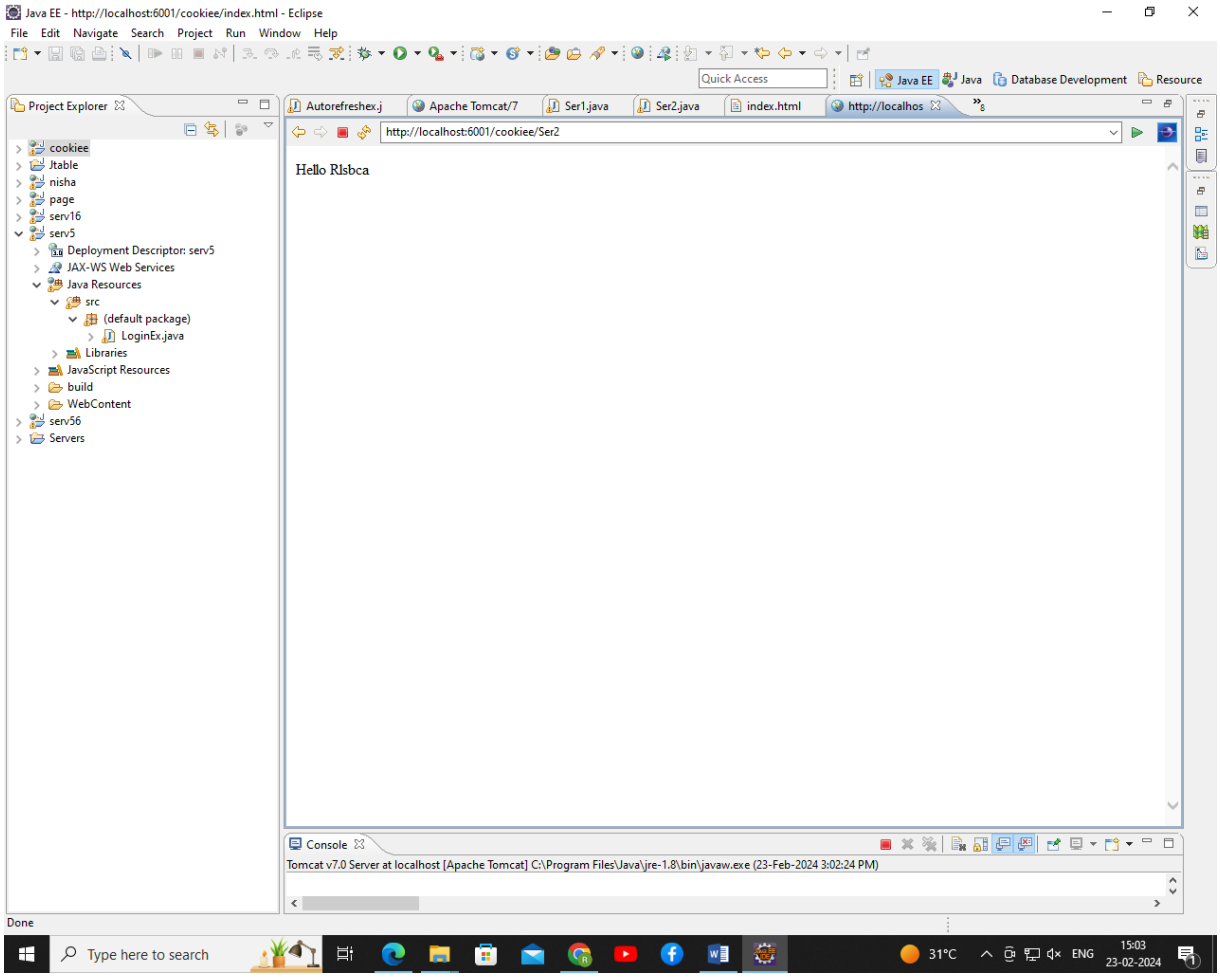
Quick Access
Java EE
Java
Database Development
Resource
Project Explorer
cookiee
Jtable
nisha
page
serv16
serv5
Deployment Descriptor: serv5
JAX-WS Web Services
Java Resources
src
(default package)
LoginEx.java
Libraries
JavaScript Resources
build
WebContent
serv56
Servers
Autorefreshex.j
Apache Tomcat/7
Ser1.java
Ser2.java
index.html
http://localhos
http://localhost:6001/cookiee/Ser1
Welcome Rlsbca visit
Console
Tomcat v7.0 Server at localhost [Apache Tomcat] C:\Program Files\Java\jre-1.8\bin\javaw.exe (23-Feb-2024 3:02:24 PM)
Done
Type here to search
31°C
ENG
15:02
23-02-2024


Java EE - http://localhost:6001/cookiee/index.html - Eclipse
File Edit Navigate Search Project Run Window Help
Quick Access
Java EE
Java
Database Development
Resource
Project Explorer
cookiee
Jtable
nisha
page
serv16
serv5
Deployment Descriptor: serv5
JAX-WS Web Services
Java Resources
src
(default package)
LoginEx.java
Libraries
JavaScript Resources
build
WebContent
serv56
Servers
Autorefreshex.j
Apache Tomcat/7
Ser1.java
Ser2.java
index.html
http://localhos
http://localhost:6001/cookiee/Ser2
Hello Rlsbca
Console
Tomcat v7.0 Server at localhost [Apache Tomcat] C:\Program Files\Java\jre-1.8\bin\javaw.exe (23-Feb-2024 3:02:24 PM)
Done
Type here to search
31°C
ENG
15:03
23-02-2024

JSP Programs

17. Write a JSP Program to demonstrate the Scriptlet tags

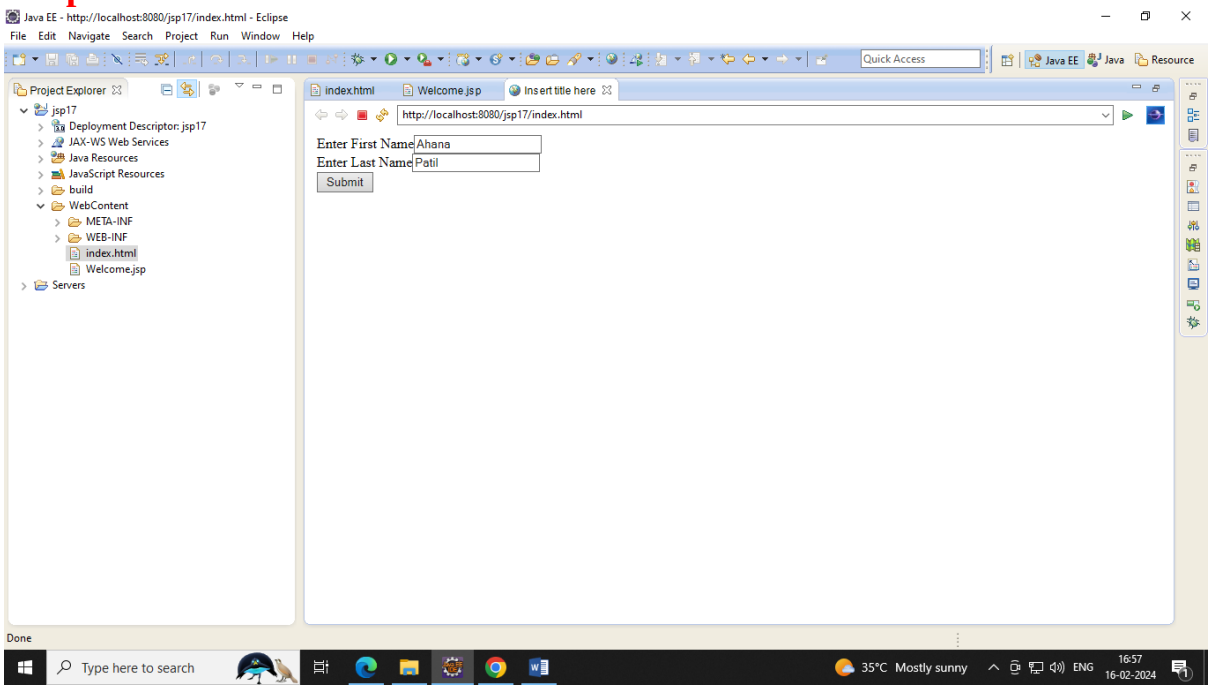
index.html

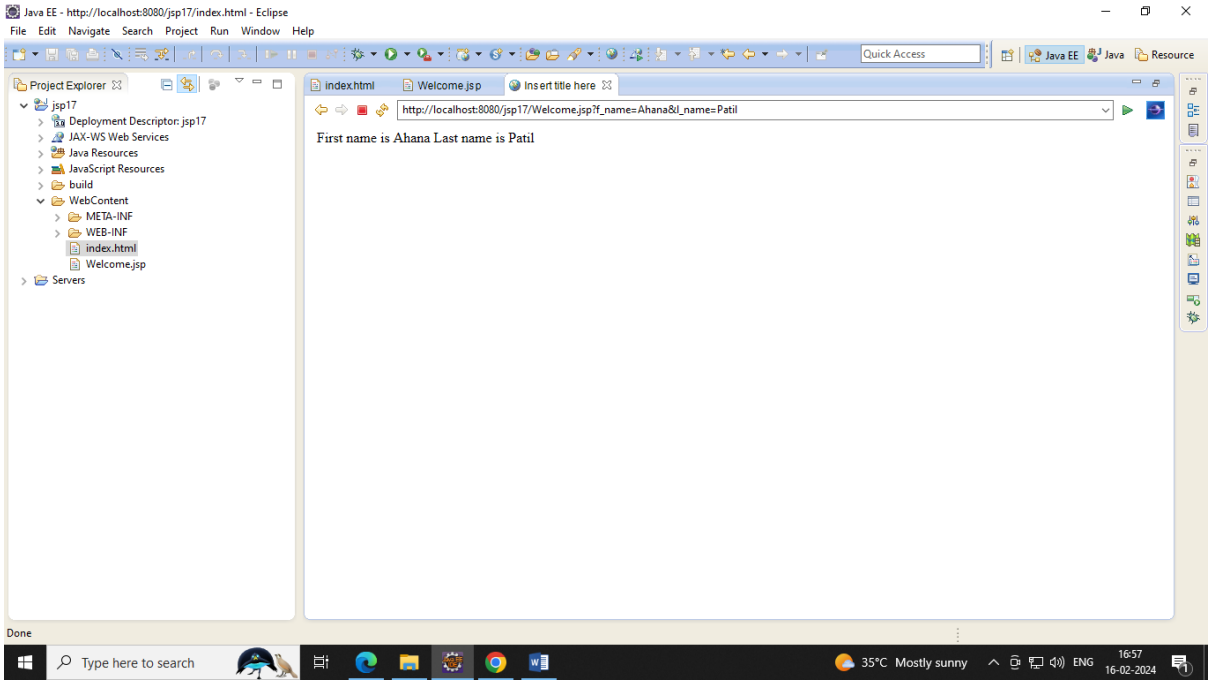
```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<form action="Welcome.jsp">
Enter First Name<input type="text" name="f_name"/><br>
Enter Last Name<input type="text" name="l_name"/><br>
<input type="submit" value="Submit"/>
</form>
</body>
</html>
```

Welcome.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>Insert title here</title>
</head>
<body>
<%
String fname=request.getParameter("f_name");
String lname=request.getParameter("l_name");
out.println("First name is"+" "+fname);
out.println("Last name is"+" "+lname);
%>

</body>
</html>
```

Output:


Java EE - http://localhost:8080/jsp17/index.html - Eclipse
File Edit Navigate Search Project Run Window Help
Project Explorer
jsp17
Deployment Descriptor: jsp17
JAX-WS Web Services
Java Resources
JavaScript Resources
build
WebContent
META-INF
WEB-INF
index.html
Welcome.jsp
Servers
index.html
Welcome.jsp
Insert title here
http://localhost:8080/jsp17/index.html
Enter First Name Ahana
Enter Last Name Patil
Submit
Done
Type here to search
35°C Mostly sunny
ENG
16:57
16-02-2024


Java EE - http://localhost:8080/jsp17/index.html - Eclipse
File Edit Navigate Search Project Run Window Help
Project Explorer
jsp17
Deployment Descriptor: jsp17
JAX-WS Web Services
Java Resources
JavaScript Resources
build
WebContent
META-INF
WEB-INF
index.html
Welcome.jsp
Servers
index.html
Welcome.jsp
Insert title here
http://localhost:8080/jsp17/Welcome.jsp?f_name=Ahana&l_name=Patil
First name is Ahana Last name is Patil
Done
Type here to search
35°C Mostly sunny
ENG
16:57
16-02-2024

18. Write a JSP Program to create Login Page and demonstrate page redirection.

//index.html

```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<form action="Welcome.jsp">
Enter User Name <input type="text" name="un"/><br>
Enter Password <input type="password" name="pwd"/><br>
<input type="submit" value="Login"/>
</form>
</body>
</html>
```

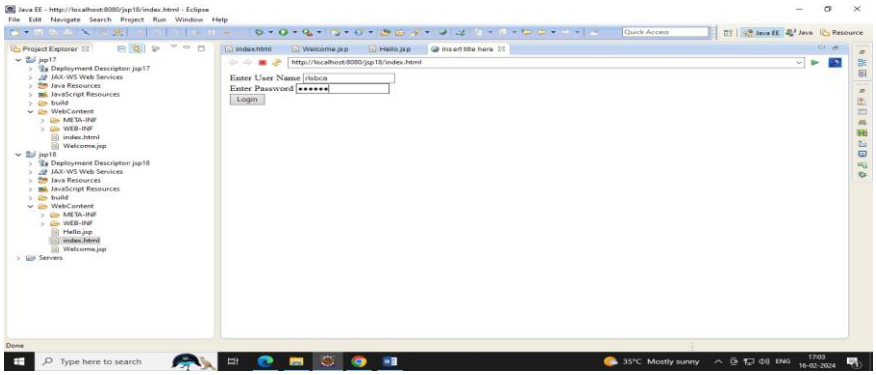
//Welcome.jsp

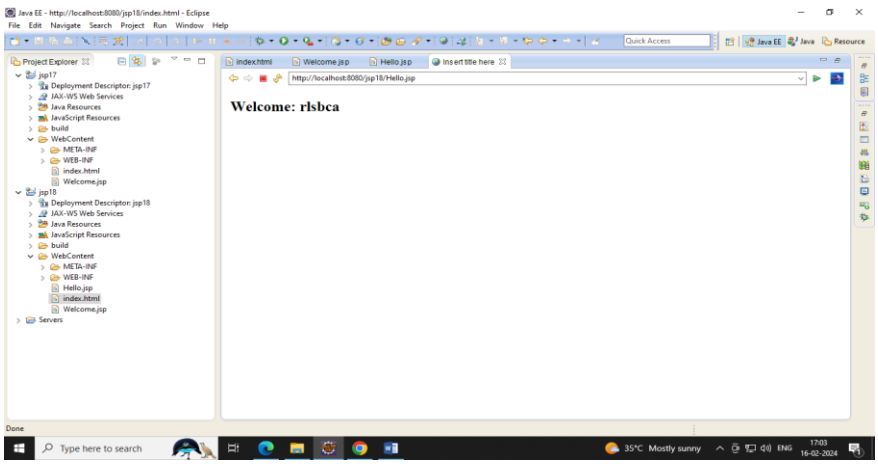
```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<%
String username=request.getParameter("un");
String password=request.getParameter("pwd");
session.setAttribute("user", username);
if(username.equalsIgnoreCase("rlsbca")&&password.equalsIgnoreCase("rlsbca"
))
{
        response.sendRedirect("Hello.jsp");
}
else
{
        response.sendRedirect("index.html");
}
%>
</body></html>
```

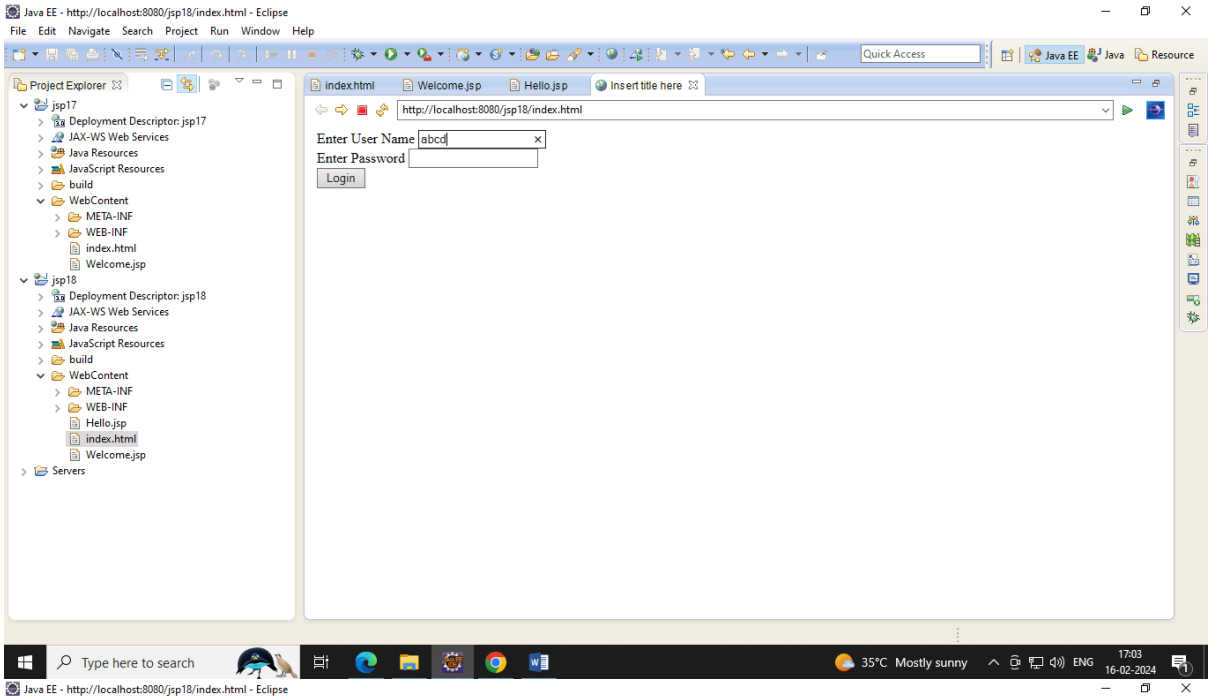
//Hello.jsp

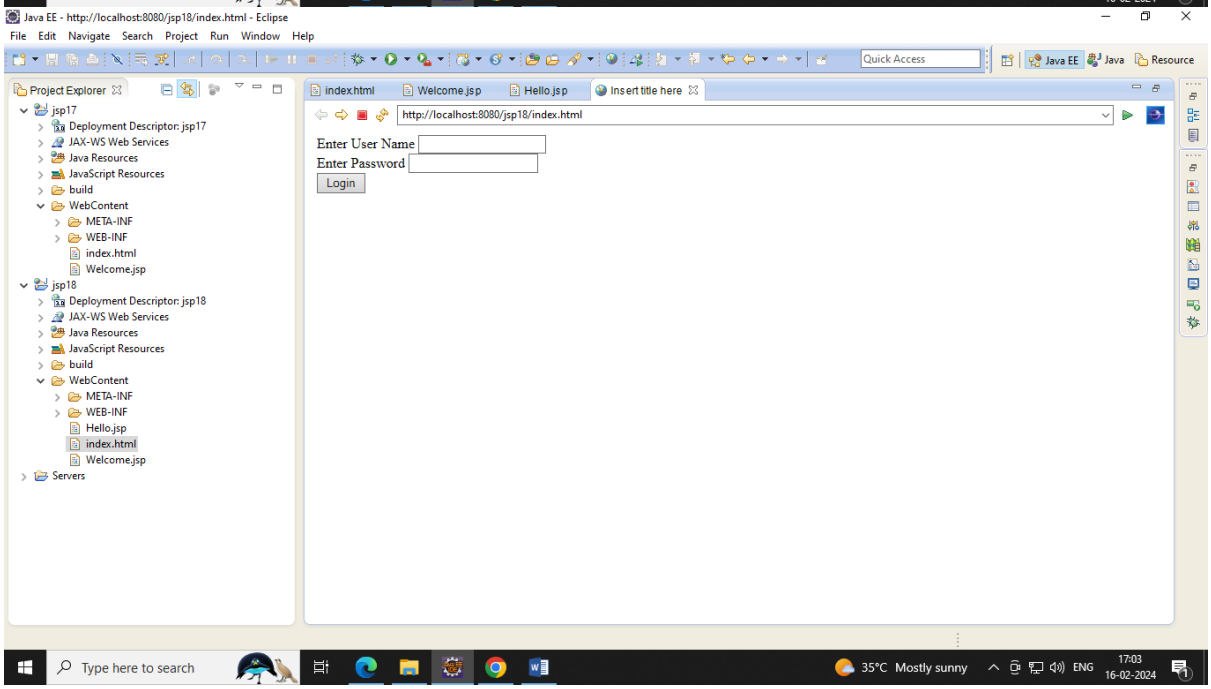
```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<h2>Welcome: <%=session.getAttribute("user") %></h2>
</body>
</html>
```

Output:






Java EE - http://localhost:8080/jsp18/index.html - Eclipse
File Edit Navigate Search Project Run Window Help
Quick Access
Java EE
Java
Resource
Project Explorer
jsp17
Deployment Descriptor: jsp17
JAX-WS Web Services
Java Resources
JavaScript Resources
build
WebContent
META-INF
WEB-INF
index.html
Welcome.jsp
jsp18
Deployment Descriptor: jsp18
JAX-WS Web Services
Java Resources
JavaScript Resources
build
WebContent
META-INF
WEB-INF
Hello.jsp
index.html
Welcome.jsp
Servers
index.html
Welcome.jsp
Hello.jsp
Insert title here
http://localhost:8080/jsp18/index.html
Enter User Name abcd
Enter Password
Login
Type here to search
35°C Mostly sunny
ENG
17:03
16-02-2024


Java EE - http://localhost:8080/jsp18/index.html - Eclipse
File Edit Navigate Search Project Run Window Help
Quick Access
Java EE
Java
Resource
Project Explorer
jsp17
Deployment Descriptor: jsp17
JAX-WS Web Services
Java Resources
JavaScript Resources
build
WebContent
META-INF
WEB-INF
index.html
Welcome.jsp
jsp18
Deployment Descriptor: jsp18
JAX-WS Web Services
Java Resources
JavaScript Resources
build
WebContent
META-INF
WEB-INF
Hello.jsp
index.html
Welcome.jsp
Servers
index.html
Welcome.jsp
Hello.jsp
Insert title here
http://localhost:8080/jsp18/index.html
Enter User Name
Enter Password
Login
Type here to search
35°C Mostly sunny
ENG
17:03
16-02-2024

19. Write a JSP Program to handle exceptions.

Index.html

```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<form action="process.jsp">
Enter First Integer:<input type="text" name="number1" /><br/>
Enter Second Integer:<input type="text" name="number2" />
<input type="submit" value="Result"/>
</form>
</body>
</html>
```

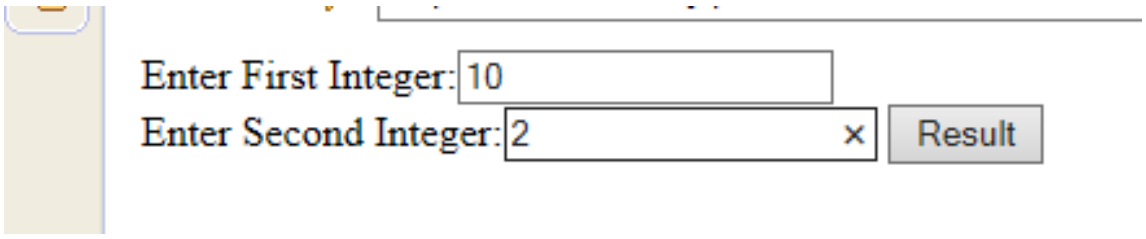
Process.jsp

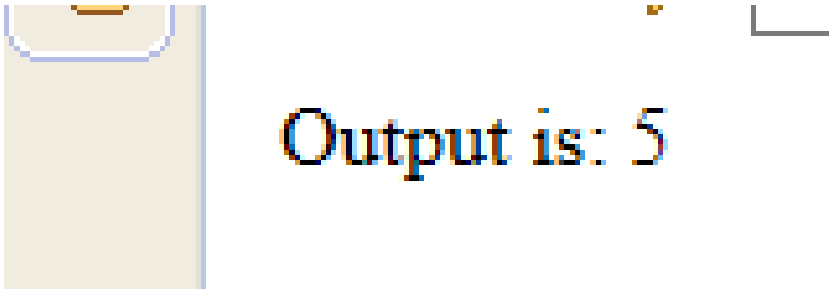
```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<%@ page errorPage="error.jsp" %>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<%
String num1=request.getParameter("number1");
String num2=request.getParameter("number2");
int n1= Integer.parseInt(num1);
int n2= Integer.parseInt(num2);
int result= n1/n2;
out.print("Output is: "+ result);
%>
</body>
</html>
```

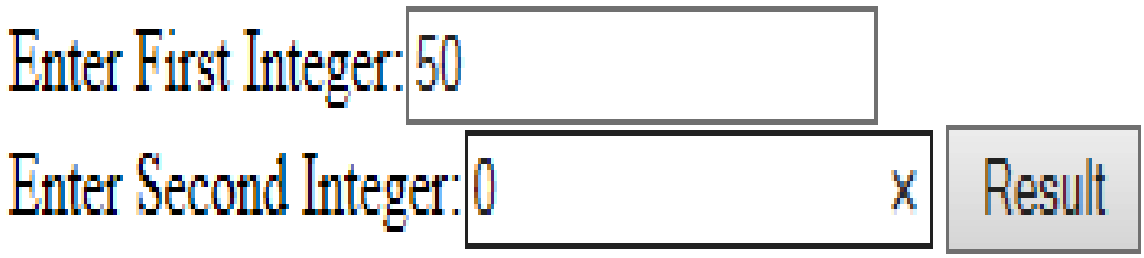
error.jsp

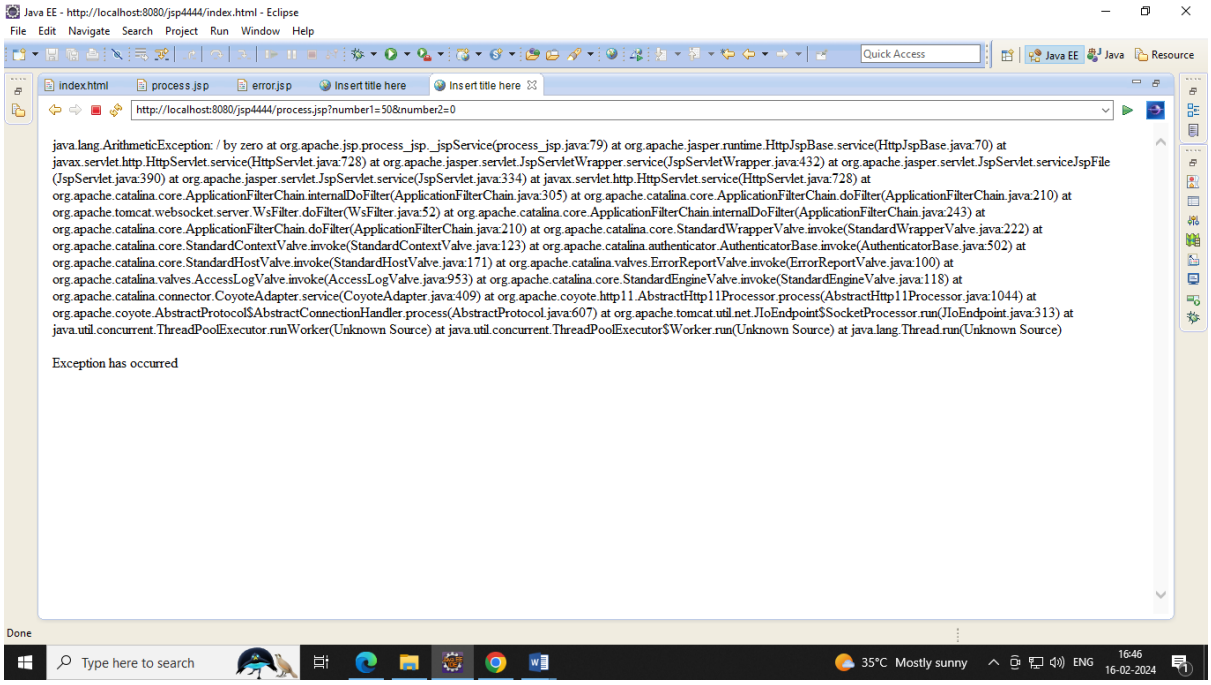
```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<%@ page isErrorPage="true" %>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=ISO-8859-1">
<title>Insert title here</title>
</head>

<title>Exception</title></head>
<body>
<p>Exception has occurred</p>
<p><% exception.printStackTrace(response.getWriter()); %></p>
</body>
</html>
```

Output:









20. Write a JSP Program to demonstrate any two implicit object.

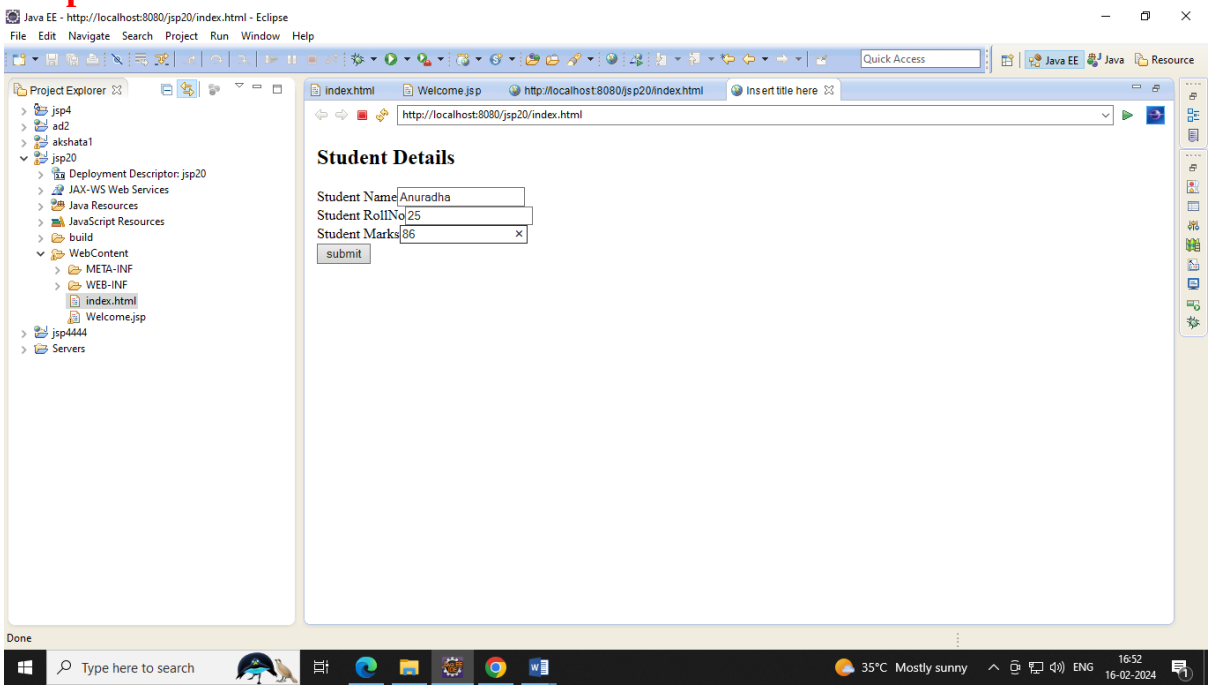
//index.html

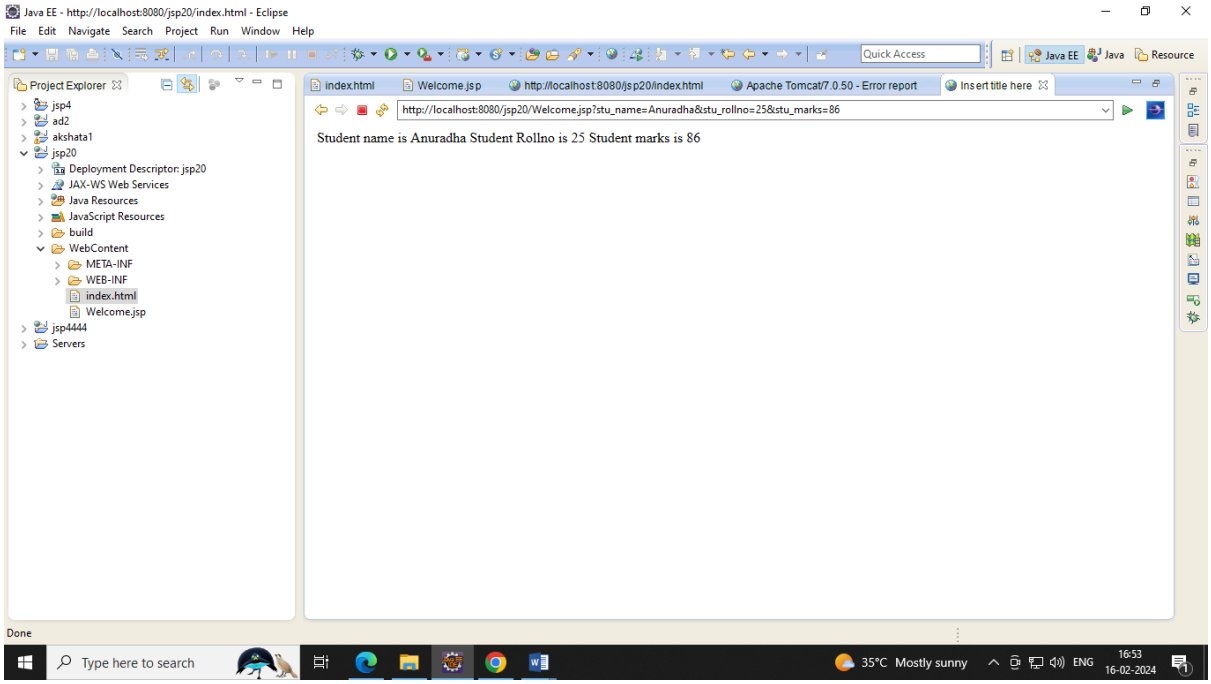
```
<!DOCTYPEhtml>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<h2>Student Details</h2>
<form action="Welcome.jsp">
Student Name<input type="text"name="stu_name"/><br>
Student RollNo<input type="text"name="stu_rollno"/><br>
Student Marks<input type="number"name="stu_marks"/><br>
<input type="submit"value="submit"/>
</form>
</body>
</html>
```

//Welcome.jsp

```
<%@page language="java" contentType="text/html; charset=ISO-8859-1"
pageEncoding="ISO-8859-1"%>
<!DOCTYPEhtmlPUBLIC"-//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>Insert title here</title>
</head>
<body>
<%
String s_name=request.getParameter("stu_name");
String s_rollno=request.getParameter("stu_rollno");
String s_marks=request.getParameter("stu_marks");

if(s_name!=null&&s_rollno!=null&&s_marks!=null&&
s_name.length()>0 &&s_rollno.length()>0 &&s_marks.length()>0)
{
        out.println("Student name is"+" "+s_name);
        out.println("Student Rollno is"+" "+s_rollno);
        out.println("Student marks is"+" "+s_marks);
}

else
{
        response.sendRedirect("index.html");
}

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

Output:


Java EE - http://localhost:8080/jsp20/index.html - Eclipse
File Edit Navigate Search Project Run Window Help
Project Explorer
jsp4
ad2
akshata1
jsp20
Deployment Descriptor: jsp20
JAX-WS Web Services
Java Resources
JavaScript Resources
build
WebContent
META-INF
WEB-INF
index.html
Welcome.jsp
jsp4444
Servers
index.html
Welcome.jsp
http://localhost:8080/jsp20/index.html
Insert title here
http://localhost:8080/jsp20/index.html
Student Details
Student Name Anuradha
Student RollNo 25
Student Marks 86
submit
Done
Type here to search
35°C Mostly sunny
ENG
16:52
16-02-2024


Java EE - http://localhost:8080/jsp20/index.html - Eclipse
File Edit Navigate Search Project Run Window Help
Project Explorer
jsp4
ad2
akshata1
jsp20
Deployment Descriptor: jsp20
JAX-WS Web Services
Java Resources
JavaScript Resources
build
WebContent
META-INF
WEB-INF
index.html
Welcome.jsp
jsp4444
Servers
index.html
Welcome.jsp
http://localhost:8080/jsp20/index.html
Apache Tomcat/7.0.50 - Error report
Insert title here
http://localhost:8080/jsp20/Welcome.jsp?stu_name=Anuradha&stu_rollno=25&stu_marks=86
Student name is Anuradha Student Rollno is 25 Student marks is 86
Done
Type here to search
35°C Mostly sunny
ENG
16:53
16-02-2024