**INDERPRASTHA ENGINEERING COLLEGE**

**GHAZIABAD**

****

**Department of Information Technology**

**SKILL 3 LAB**

**(2019-20)**

**Name : Natasha Sharma**

**Roll Number : 1703013043**

**Course : B.Tech. (I.T.)**

**Year : 3**

**Semester : 6**

**Section : A**

**INDEX**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S.No.** | **OBJECTIVE** | **DATE** | **PAGE No** | **SIGN** | **Remark** |
| 1. | Write a program in Java to find nth term of the series 3,6,18,24,45,54…. | 28/1/2020 | 3 |  |  |
| 2. | Write a program in Java considers first n even numbers starting from 0 and find sum of all these number divisible by 3 and print sum. | 28/1/2020 | 4 |  |  |
| 3. | Write program in java to print all pairs of {1,5,7,-1,5} with given sum 6. | 28/1/2020 | 5 |  |  |
| 4. | Program to implement applet. | 11/2/2020 | 6 |  |  |
| 5. | Applet Event handling : Java program to add two numbers using java Applet. | 18/2/2020 | 7-9 |  |  |
| 6. | Program to create a page with a button using Java AWT. | 25/2/2020 | 10 |  |  |
| 7. | Program to create Login page using java AWT. | 25/2/2020 | 11-12 |  |  |
| 8. | Java program to implement JDBC connectivity to read employee table with MySQL. | 3/3/2020 | 13-14 |  |  |
| 9. | Write a servlet for displaying a string “HELLO WORLD!”. | 22/4/2020 | 15-16 |  |  |
| 10. | Write a servlet for Login operation.In this program we are creating an index page. User can input his/her user name and password. If the user name and password is valid then user can successfully logged in. | 22/4/2020 | 17-20 |  |  |
| 11. | Write a JSP for displaying a string “HELLO WORLD!”. | 29/4/2020 | 21 |  |  |
| 12. | Create a web application using JSP in which, end user should be able to enter A/C number into the web form and get the Account details. | 29/4/2020 | 22-24 |  |  |

**Practical 1**

**Objective:- Write program in java to find nth term of the series 3,6,18,24,45,54,…**

**Source Code :-**

class Nth {

public intnthTerm(int N)

{

return (N \* ((N / 2) + ((N % 2) \* 2) + N));

}

}

public class Main {

public static void main(String[] args)

{

int N = 5;

Nth a = new Nth();

System.out.println("Nth term for N = "

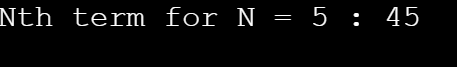
+ N + " : "

+ a.nthTerm(N));

}

}

**Output :-**



**Practical 2**

**Objective:- Write a program in java consider first n even numbers starting from 0 and find sum of all these no. divisible by 3 and print sum n=5**

**Source Code :-**

public class Main

{

public static void main(String args[])

{

inti,a=0,n=5;

for(i=0;i<(2\*n);i++)

{

if(i%2==0)

{

System.out.print(i+"");

a=a+i;

}

}

System.out.println("Sum of even no. divisible by 3: " + (a/3));

}

}

**Output:-**

**Practical 3**

**Objective:- Write program in java to print all pairs of {1,5,7,-1,5} with given sum "6"**

**Source Code :-**

public class Main

{

public static void main(String args[])

{

inti,j,arr[]={1,5,7,-1,5};

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

{

for(j=i+1;j<5;j++)

{

if((arr[i]+arr[j])==6)

System.out.println("("+ arr[i] +","+arr[j]+")");

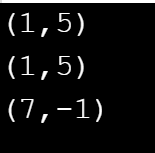
}

}

}

}

**Output:-**



**PRACTICAL 4**

**Objective: Program to implement applet.**

**SOURCE CODE:**

import java.awt.\*;

import java.applet.\*;

public class Simple extends Applet

{

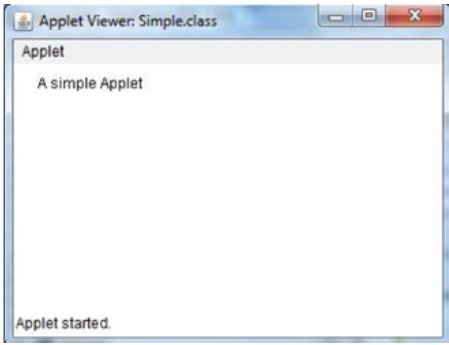
public voidpaint(Graphics g)

 {

  g.drawString("A simple Applet", 20, 20); }

 }

**OUTPUT:**

****

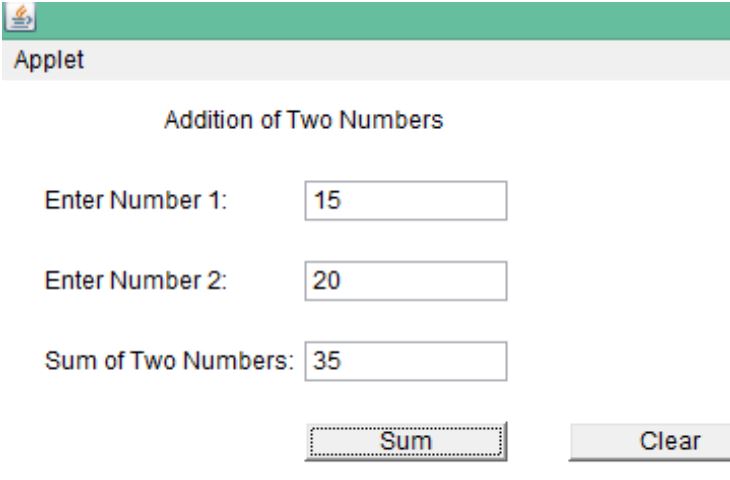
**PRACTICAL 5**

**Objective: Applet Event handling : Java program to add two numbers using java Applet.**

**SOURCE CODE:**

import java.awt.\*;  
import java.applet.\*;  
import java.awt.event.\*;  
import java.awt.Label;  
  
public class add extends Applet implements ActionListener{  
      TextField text1,text2,output;  
      Label label1,label2,label3,title;  
      Button button,clear;  
      public void init(){  
        setLayout(null);  
  
  
  
  
          title = new Label("Addition of Two Numbers");  
  title.setBounds(80,10,140,20);  
  add(title);  
  title.setAlignment(title.CENTER);  
  
        label1 = new Label("Enter Number 1: ");  
        label1.setBounds(20,50,100,20);  
        add(label1);  
  
        text1 = new TextField(5);  
        text1.setBounds(150,50,100,20);  
        add(text1);  
  
        label2 = new Label("Enter Number 2: ");  
        label2.setBounds(20,90,100,20);  
        add(label2);  
  
        text2 = new TextField(5);  
        text2.setBounds(150,90,100,20);  
        add(text2);  
  
        label3 = new Label("Sum of Two Numbers: ");  
        label3.setBounds(20,130,130,20);  
        add(label3);  
  
        output = new TextField(5);  
        output.setBounds(150,130,100,20);  
        add(output);  
  
        button = new Button("Sum");  
        button.setBounds(150,170,100,20);  
        add(button);  
  
clear = new Button("Clear");  
        clear.setBounds(280,170,100,20);  
        add(clear);  
  
        button.addActionListener(this);  
        clear.addActionListener(this);  
  
  
        }  
        public void actionPerformed(ActionEvent ae){  
        int num1=Integer.parseInt(text1.getText());  
        int num2=Integer.parseInt(text2.getText());  
        int sum=num1+num2;  
        output.setText(Integer.toString(sum));  
if(ae.getSource() == clear)  
{  
 text1.setText("");  
  text2.setText("");  
   output.setText("");  
   text1.requestFocus();  
    }  
}  
}

**OUTPUT:**



**PRACTICAL 6**

**Objective: Program to create a page with a button using Java AWT.**

**SOURCE CODE:**

**import** java.awt.\*;

**import** java.awt.event.\*;

**public** **class** ButtonExample {

**public** **static** **void** main(String[] args) {

     Frame f=**new** Frame("Button Example");

**final** TextField tf=**new** TextField();

     tf.setBounds(50,50, 150,20);

     Button b=**new** Button("Click Here");

     b.setBounds(50,100,60,30);

     b.addActionListener(**new** ActionListener(){

**public** **void** actionPerformed(ActionEvent e){

tf.setText("Welcome to Javatpoint.");

  }

});

f.add(b);f.add(tf);

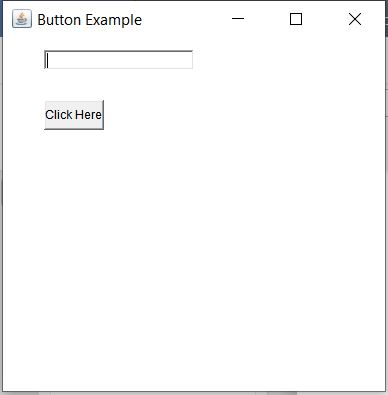
f.setSize(400,400);

f.setLayout(**null**);

f.setVisible(**true**);

}}

**OUTPUT:**



**PRACTICAL 7**

**Objective: Program to create Login page using java AWT.**

**SOURCE CODE:**

import java.awt.\*;

import java.awt.event.\*;

class MyLoginWindow extends Frame

{

TextField name,pass;

Button b1,b2;

MyLoginWindow()

{

setLayout(new FlowLayout());

this.setLayout(null);

Label n=new Label("Name:",Label.CENTER);

Label p=new Label("password:",Label.CENTER);

name=new TextField(20);

pass=new TextField(20);

pass.setEchoChar('#');

b1=new Button("submit");

b2=new Button("cancel");

this.add(n);

this.add(name);

this.add(p);

this.add(pass);

this.add(b1);

this.add(b2);

n.setBounds(70,90,90,60);

p.setBounds(70,130,90,60);

name.setBounds(200,100,90,20);

pass.setBounds(200,140,90,20);

b1.setBounds(100,260,70,40);

b2.setBounds(180,260,70,40);

}

public static void main(String args[])

{

MyLoginWindow ml=new MyLoginWindow();

ml.setVisible(true);

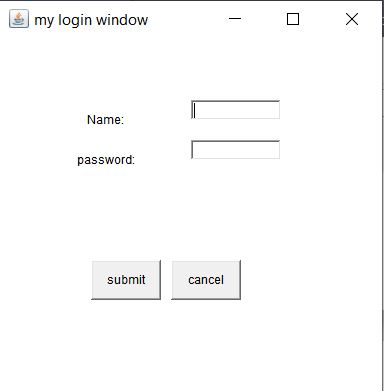
ml.setSize(400,400);

ml.setTitle("my login window");

}

}

**OUTPUT:**



**Program 8**

**Objective: Java program to implement JDBC connectivity to read employee table with MySQL.**

**SOURCE CODE:**

**Java\_Mysql.java**

importjava.sql.\*;

public class Java\_Mysql {

public static void main(String args[])

{

try {

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

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

Statement stmt = con.createStatement();

ResultSetrs = stmt.executeQuery("Select \* from Student");

while (rs.next())

{

System.out.println(rs.getInt(1)+" "+rs.getString(2)+" "+rs.getString(3));

}

con.close();

}

catch(Exception e)

{

System.out.println(e);

}

}

}

**data.sql**

CREATE DATABASE Students;

USE Students;

CREATE TABLE Student (

student\_id INT(10),

student\_name VARCHAR(30),

student\_branch VARCHAR(30)

);

INSERT into Student values (

1234,

"Rohan",

"Information Technology"

);

INSERT into Student values (

5678,

"Max",

"Mechanical"

);

INSERT into Student values (

1432,

"John",

"Computer Science"

);

SELECT \* FROM Student;

**OUTPUT**

**PRACTICAL 9**

**Objective: Write a servlet for displaying a string “HELLO WORLD!”.**

**SOURCE CODE:**

**DemoServlet.java**

import javax.servlet.http.\*;

import javax.servlet.\*;

import java.io.\*;

public class DemoServlet extends HttpServlet{

public void doGet(HttpServletRequest req,HttpServletResponse res)

throws ServletException,IOException

{

res.setContentType("text/html");//setting the content type

PrintWriter pw=res.getWriter();//get the stream to write the data

//writing html in the stream

pw.println("<html><body>");

pw.println("<h1>Hello World !</h1>");

pw.println("</body></html>");

pw.close();//closing the stream

}}

**web.xml**

<web-app>

<servlet>

<servlet-name>sonoojaiswal</servlet-name>

<servlet-class>DemoServlet</servlet-class>

</servlet>

<servlet-mapping>

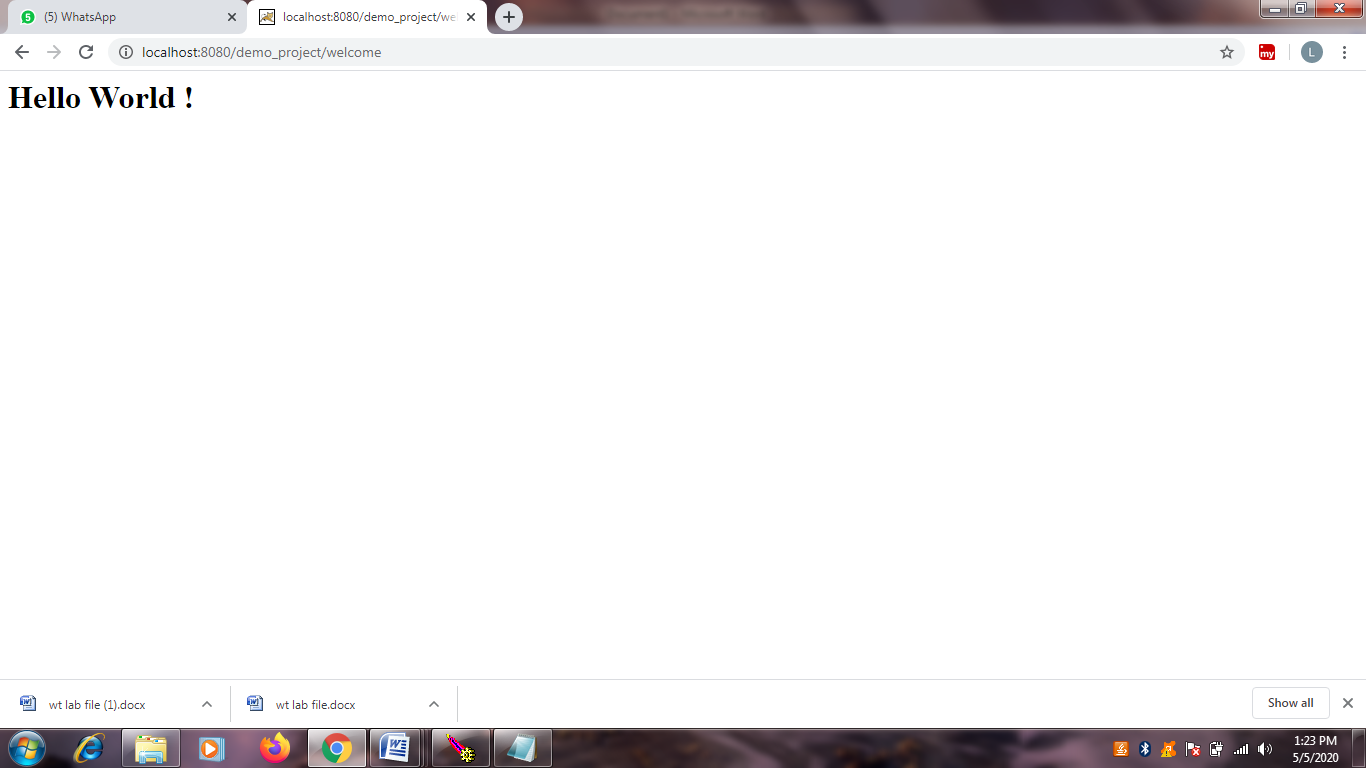
<servlet-name>sonoojaiswal</servlet-name>

<url-pattern>/welcome</url-pattern>

</servlet-mapping>

</web-app>

**Output**



**PRACTICAL 10**

**Objective: Write a servlet for Login operation.In this program we are creating an index page. User can input his/her user name and password. If the user name and password is valid then user can successfully logged in.**

**Source Code:**

**Index.html**

<HTML>

<BODY BGCOLOR="WHEAT">

<CENTER>

<FORM ACTION="./db" method="post">

Username<INPUT TYPE="TEXT" NAME="t1"><BR/><BR/>

password<INPUT TYPE="password" name="t2"><br/><br/>

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

<input type="reset" value="reset"/>

</FORM>

</BODY>

</HTML>

**LoginServlet.java**

import javax.servlet.\*;

import javax.servlet.http.\*;

import java.sql.\*;

import java.io.\*;

public class LoginServlet extends HttpServlet

{

Connection con;

public void init(ServletConfig config)

{

try{

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

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

System.out.println("Connected");

}

catch(Exception e)

{

System.out.println(e);

}

}//init()

public void doPost(HttpServletRequest request, HttpServletResponse response)

{

try{

int flag=0;

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

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

System.out.println(name+""+pass);

response.setContentType("text/html");

PrintWriter pw=response.getWriter();

pw.println("<html>");

pw.println("<body>");

String sql="select \* from lopa.login";

Statement st=con.createStatement();

ResultSet rs=st.executeQuery(sql);

while(rs.next())

{

String nm=rs.getString(1);

String ps=rs.getString(2);

if(nm.equals(name) && ps.equals(pass)){

pw.println("<h1>Logged in successfully</h1>");

flag=1;

break;

}

}

if(flag==0){

pw.println("<h2>Invalid user name or password</h2>");

}

rs.close();

st.close();

pw.close();

}

catch(Exception e)

{

System.out.println(e);

}

}//doPost()

public void destroy(){

try{

con.close();

}

catch(Exception e)

{

System.out.println(e);

}

}//destroy()

}

**web.xml**

<web-app>

<servlet>

<servlet-name>servlet1</servlet-name>

<servlet-class>LoginServlet</servlet-class>

</servlet>

<servlet-mapping>

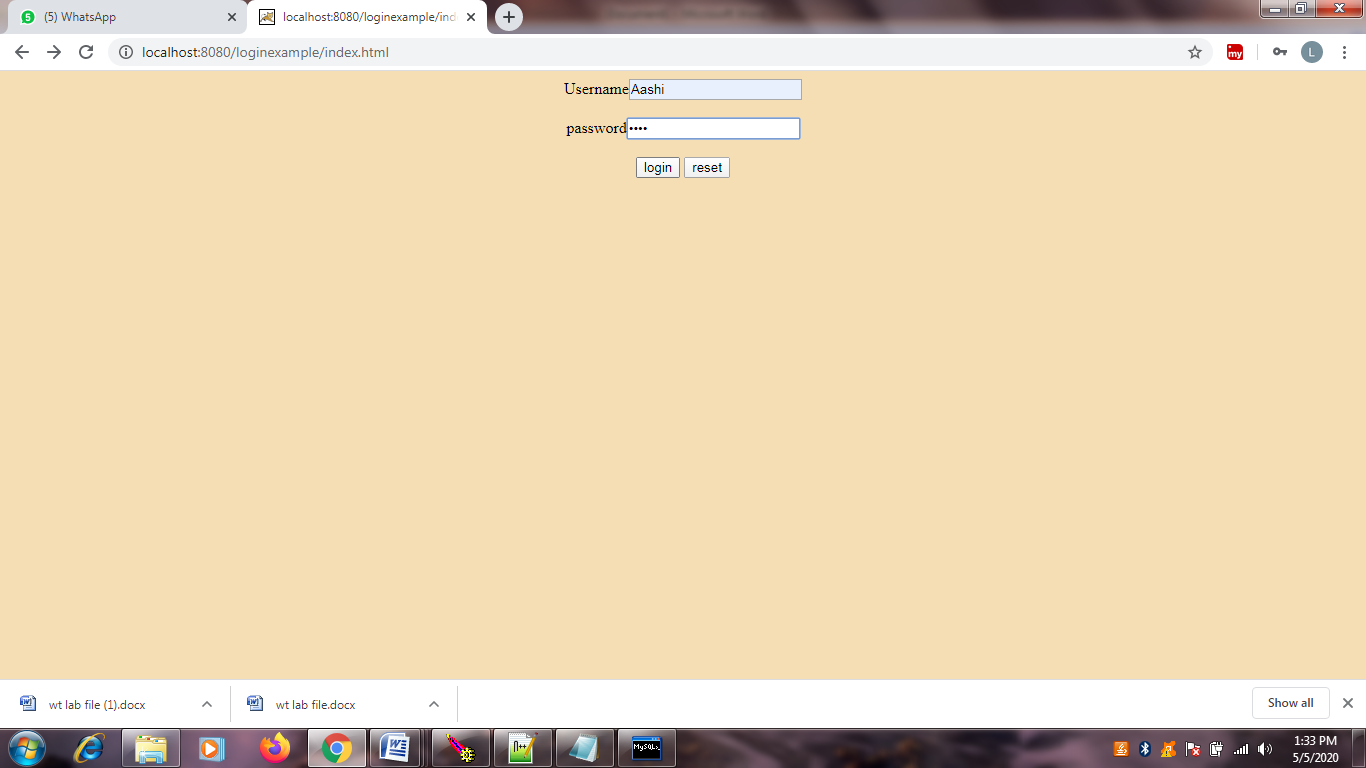
<servlet-name>servlet1</servlet-name>

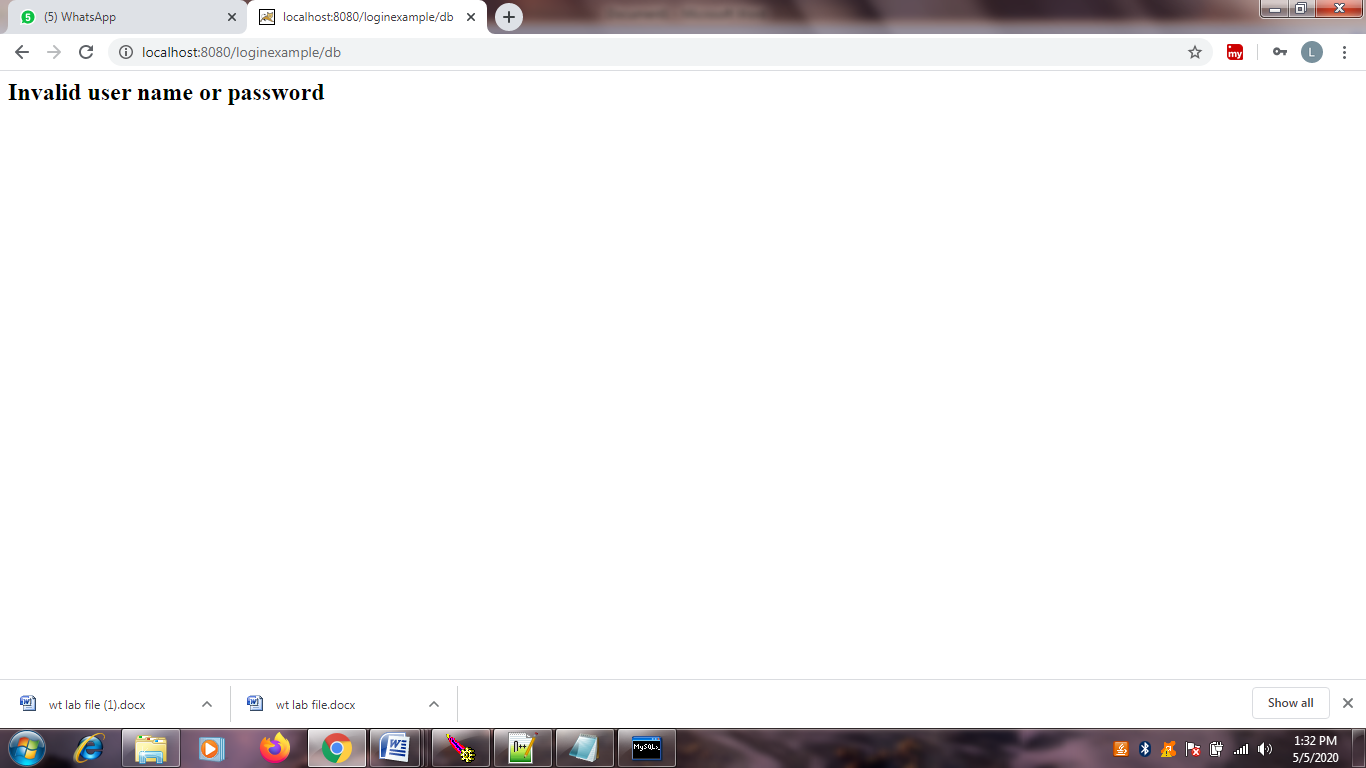
<url-pattern>/db</url-pattern>

</servlet-mapping>

</web-app>

**Output**

****

****

**PRACTICAL 11**

**Objective: Write a JSP for displaying a string “HELLO WORLD!”.**

**Source Code:**

**test.jsp**

<html>

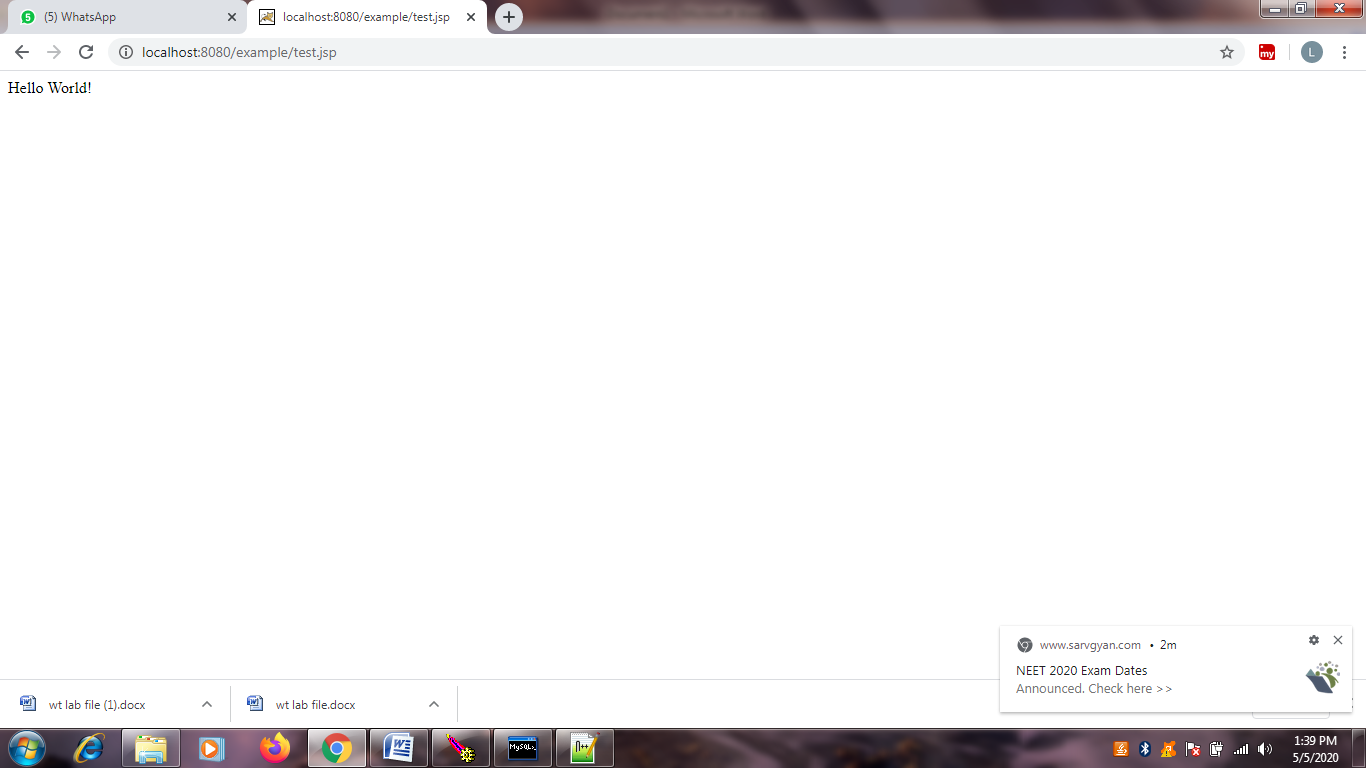
<body>

<% out.print("Hello World!");%>

</body>

</html>

**Output:**



**PRACTICAL 12**

**Objective: Create a web application using JSP in which, end user should be able to enter A/C number into the web form and get the Account details.**

**Source Code:**

**account.html**

<HTML>

<BODY BGCOLOR="WHEAT">

<CENTER>

<FORM ACTION="account.jsp">

ENTER A/C NUMBER<INPUT TYPE="TEXT" NAME="t1"><BR/><BR/>

<INPUT TYPE="SUBMIT" VALUE="GETDETAILS">

</FORM>

</BODY>

</HTML>

**account.jsp**

<%@ page import="java.sql.\*"%>

<%!

Connection con;

public void jspInit()

{

try{

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

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

}//try

catch(Exception e){

System.out.println(e);

}

}//jspInit()

public void jspDestroy(){

try{

con.close();

}

catch(Exception e){

System.out.println(e);

}

}//jspDestroy()

%>

<%

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

String sql="select \* from account where accno="+ano;

Statement st=con.createStatement();

ResultSet rs=st.executeQuery(sql);

if(rs.next())

{

String nm=rs.getString(2);

int bal=rs.getInt(3);

%>

<h1>A/C Details</h1>

<h2>A/C holder Name:<%= nm%></h2>

<h2>Balance: Rs<%= bal %></h2>

<%

}//if

else{

%>

<h1>A/C does not exst</h1>

<%

}//else

%>

**web.xml**

<web-app>

</web-app>

**Output**

