**Exp 1**

import java.applet.\*;

import java.awt.Graphics;

import java.awt.event.KeyEvent;

import java.awt.event.KeyListener;

public class Exp\_001 extends Applet implements KeyListener { String msg="";

public void init() { addKeyListener(this);

}

public void paint(Graphics g) { g.drawString(msg, 90, 40);

}

@Override

public void keyTyped(KeyEvent e) { char c = e.getKeyChar();

msg = "Key Typed : "+c; repaint();

}

@Override

public void keyPressed(KeyEvent e) { msg = "Key Pressed"; repaint();

}

@Override

public void keyReleased(KeyEvent e) { msg = "Key Released"; repaint();

**Exp 2**

import java.awt.Frame;

import java.awt.Label;

import java.awt.event.MouseEvent;

import java.awt.event.MouseListener;

import java.awt.event.WindowAdapter;

import java.awt.event.WindowEvent;

public class Exp04 implements MouseListener{ Label l;

Exp04(){

Frame f = new Frame("Mouse Event"); f.setSize(300,300); f.setLayout(null); f.setVisible(true); f.addMouseListener(this);

l = new Label("Mouse Events"); l.setBounds(100, 100, 150, 30); f.add(l);

f.addWindowListener(new WindowAdapter() { public void windowClosing(WindowEvent e) {

f.dispose();

}

});

}

public static void main(String[] args) { Exp04 obj = new Exp04();

}

@Override

public void mouseClicked(MouseEvent e) { l.setText("Mouse Clicked");

}

@Override

public void mousePressed(MouseEvent e) { l.setText("Mouse Pressed");

}

@Override

public void mouseReleased(MouseEvent e) { l.setText("Mouse released");

}

@Override

public void mouseEntered(MouseEvent e) { l.setText("Mouse Entered");

}

@Override

public void mouseExited(MouseEvent e) { l.setText("Mouse Exited");

}

}

**Exp 3**

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

import javax.swing.JButton;

import javax.swing.JFrame;

import javax.swing.JLabel;

import javax.swing.JTextField;

public class Exp02 implements ActionListener { JTextField jtf1,jtf2,jtf3,jtf4,jtf5,jtf6,jtf7; Exp02(){

JFrame f = new JFrame("Students Results"); f.setLayout(null);

f.setSize(500,500); f.setVisible(true);

JLabel l1 = new JLabel("Exam Marks Entry"); l1.setBounds(175,20,150,30);

f.add(l1);

JLabel l2 = new JLabel("Name:"); l2.setBounds(125,60,150,20); f.add(l2);

jtf1 = new JTextField(); jtf1.setBounds(175,60,150,20); f.add(jtf1);

JLabel l3 = new JLabel("Roll No:"); l3.setBounds(125,90,150,20); f.add(l3);

jtf2 = new JTextField(); jtf2.setBounds(175,90,150,20); f.add(jtf2);

JLabel l4 = new JLabel("Subjects"); l4.setBounds(150,120,150,20); f.add(l4);

JLabel l5 = new JLabel("Marks"); l5.setBounds(275,120,150,20); f.add(l5);

JLabel l6 = new JLabel("English"); l6.setBounds(150,150,150,20); f.add(l6);

jtf3 = new JTextField(); jtf3.setBounds(225,150,150,20); f.add(jtf3);

JLabel l7 = new JLabel("Maths"); l7.setBounds(150,180,150,20); f.add(l7);

jtf4 = new JTextField(); jtf4.setBounds(225,180,150,20); f.add(jtf4);

JLabel l8 = new JLabel("Science"); l8.setBounds(150,210,150,20); f.add(l8);

jtf5 = new JTextField(); jtf5.setBounds(225,210,150,20); f.add(jtf5);

JLabel l9 = new JLabel("Hindi"); l9.setBounds(150,240,150,20); f.add(l9);

jtf6 = new JTextField(); jtf6.setBounds(225,240,150,20); f.add(jtf6);

JLabel l10 = new JLabel("Marathi"); l10.setBounds(150,270,150,20); f.add(l10);

jtf7 = new JTextField(); jtf7.setBounds(225,270,150,20); f.add(jtf7);

JButton jb = new JButton("Submit"); jb.setBounds(175,310,150,20); jb.addActionListener(this);//imp to register listener f.add(jb);

}

public static void main(String[] args) { Exp02 obj = new Exp02();

}

@Override

public void actionPerformed(ActionEvent e) { JFrame f1 = new JFrame("Students Results");

f1.setLayout(null); f1.setSize(500,500); f1.setVisible(true);

JLabel l1 = new JLabel("Examination Results"); l1.setBounds(175,20,150,30);

f1.add(l1);

JLabel l2 = new JLabel("Name:"); l2.setBounds(125,60,150,20); f1.add(l2);

String na = jtf1.getText(); JLabel l11 = new JLabel(na); l11.setBounds(175,60,150,20); f1.add(l11);

JLabel l3 = new JLabel("Roll No:"); l3.setBounds(125,90,150,20); f1.add(l3);

String ro = jtf2.getText(); JLabel l12 = new JLabel(ro); l12.setBounds(175,90,150,20); f1.add(l12);

JLabel l4 = new JLabel("Subjects"); l4.setBounds(150,120,150,20); f1.add(l4);

JLabel l5 = new JLabel("Marks"); l5.setBounds(275,120,150,20);

f1.add(l5);

JLabel l6 = new JLabel("English"); l6.setBounds(150,150,150,20); f1.add(l6);

String se = jtf3.getText(); JLabel l13 = new JLabel(se); l13.setBounds(280,150,150,20); f1.add(l13);

JLabel l7 = new JLabel("Maths"); l7.setBounds(150,180,150,20); f1.add(l7);

String sm = jtf4.getText(); JLabel l14 = new JLabel(sm); l14.setBounds(280,180,150,20); f1.add(l14);

JLabel l8 = new JLabel("Science"); l8.setBounds(150,210,150,20); f1.add(l8);

String ss = jtf5.getText(); JLabel l15 = new JLabel(ss); l15.setBounds(280,210,150,20); f1.add(l15);

JLabel l9 = new JLabel("Hindi"); l9.setBounds(150,240,150,20); f1.add(l9);

String sh = jtf6.getText(); JLabel l16 = new JLabel(sh); l16.setBounds(280,240,150,20); f1.add(l16);

JLabel l10 = new JLabel("Marathi"); l10.setBounds(150,270,150,20); f1.add(l10);

String smar = jtf7.getText(); JLabel l17 = new JLabel(smar); l17.setBounds(280,270,150,20); f1.add(l17);

int s1 = Integer.parseInt(se); int s2 = Integer.parseInt(sm); int s3 = Integer.parseInt(ss); int s4 = Integer.parseInt(sh); int s5 = Integer.parseInt(smar);

int sum = s1+s2+s3+s4+s5;

double percentage = (sum\*100)/500;

JLabel l18 = new JLabel("Percentage = " + percentage); l18.setBounds(180, 300, 150, 20);

f1.add(l18);

String str;

if(percentage > 35 && percentage >75) { str = "Fail";

}

else if(percentage > 35 && percentage > 95 ){ str = "Outstanding";

}

else if(percentage > 35) { str = "Pass";

}

else {

str = "Fail";

}

JLabel l19 = new JLabel("Status = " + str); l19.setBounds(180, 330, 150, 20); f1.add(l19);

}

}

**Exp 4**

**import** java.sql.\*;

**public class** Exp4 {

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

String url = "jdbc:mysql://localhost:3306/jdbcdb"; String usr = "root";

String psw = "Sakshi@1026";

String query1 = "insert into studentdata values(1,34, 'Sakshi', 'Kadu', 'sakshikadu2922@gmail.com', 9322387494)";

String query2 = "select \* from studentdata";

**try** {

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

DriverManager.getConnection("jdbc:mysql://localhost:3306/jdbcdb", "root", "Sakshi@1026");

Statement stmt = con.createStatement(); System.***out***.println("Inserting data...");

stmt.execute(query1);

System.***out***.println("Data after insertion..."); ResultSet rs = stmt.executeQuery(query2);

System.***out***.println("Sr.No. " + "Roll No. " + "First Name " + "Last Name " + " Email ID "+ " Mobile No.");

**while** (rs.next()) {

System.***out***.println(" " + rs.getInt("SrNo") + " " + rs.getInt("RollNo") + " "+rs.getString("first\_name")+ " " + rs.getString("last\_name") + " "+ rs.getString("email\_id")+ " " + rs.getString("mobile"));

}

rs.close();

stmt.close();

con.close();

} **catch** (SQLException e) { e.printStackTrace();

} **catch** (ClassNotFoundException e) { e.printStackTrace();

}

}

}

**Exp 5**

package RMI\_5; import

java.rmi.Remote;

import java.rmi.RemoteException;

public interface PallindromeChecker extends Remote {

boolean isPalindrome(String str) throws RemoteException;

}

Remote Interface Implementation:

package RMI\_5; import

java.rmi.RemoteException;

import java.rmi.server.UnicastRemoteObject;

public class PallindromeCheckerImpl extends UnicastRemoteObject

implements PallindromeChecker {

protected PallindromeCheckerImpl() throws RemoteException {

super();

}

@Override

public boolean isPalindrome(String str) throws RemoteException {

// Remove all non-alphanumeric characters and convert to lowercase

String cleanStr = str.replaceAll("[^a-zA-Z0-9]", "").toLowerCase();

// Check if the clean string is a palindrome int

left = 0;

int right = cleanStr.length() - 1;

while (left < right) {

if (cleanStr.charAt(left) != cleanStr.charAt(right)) {

return false;

}

left++; right--;

}

return true;

}

}

RMIServer :

package RMI\_5;

import java.rmi.RemoteException; import

java.rmi.registry.LocateRegistry; import

java.rmi.registry.Registry; import

java.rmi.server.UnicastRemoteObject; public

class RMIServer extends

UnicastRemoteObject implements

PallindromeChecker { protected RMIServer() throws

RemoteException {

super();

}

@Override

public boolean isPalindrome(String str) throws RemoteException {

// Remove all non-alphanumeric characters and convert to lowercase

String cleanStr = str.replaceAll("[^a-zA-Z0-9]", "").toLowerCase();

// Check if the clean string is a palindrome

int left = 0;

int right = cleanStr.length() - 1;

while (left < right) {

if (cleanStr.charAt(left) != cleanStr.charAt(right)) {

return false;

}

left++; right--;

}

return true;

}

public static void main(String[] args) {

try {

// Create an instance of the RMIServer

RMIServer server = new RMIServer();

// Bind the RMIServer to the RMI registry

Registry registry = LocateRegistry.createRegistry(1099);

// Default RMI registry port registry.rebind("PalindromeService",

server);

System.out.println("Server started...");

} catch (Exception e) {

System.err.println("Server exception: " + e.toString());

e.printStackTrace();

}

}

}

RMIClient:

package RMI\_5;

import java.rmi.registry.LocateRegistry;

import java.rmi.registry.Registry;

import java.util.Scanner; public class

RMIClient {

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

{

// Get a reference to the RMI registry

Registry registry = LocateRegistry.getRegistry("localhost", 1099);

// Use the same port as server

// Look up the remote object from the registry

PallindromeChecker palindromeChecker =

(PallindromeChecker)registry.lookup("PalindromeService");

// Create a Scanner object for user input

Scanner scanner = new Scanner(System.in);

// Ask the user for input

System.out.print("Enter a string or number to check for palindrome: ");

String input = scanner.nextLine();

// Call the remote method with the user's input boolean

isPalindrome = palindromeChecker.isPalindrome(input);

// Display the result

System.out.println("'" + input + "' is a palindrome: " + isPalindrome);

// Close the scanner scanner.close();

} catch (Exception e) {

System.err.println("Client exception: " + e.toString());

e.printStackTrace();

}

}

}

**Exp 6**

public static void main(String args[])

throws UnknownHostException

{

System.out.println("Details of Machine

getLocalHost(): ");

InetAddress Address =

InetAddress.getLocalHost();

System.out.println(Address);

System.out.println();

System.out.println("Details of Machine

getByName(): ");

Address =

InetAddress.getByName("LAPTOP-LR493K09");

System.out.println(Address);

System.out.println();

System.out.println("Details

'www.google.com' getByName(): ");

InetAddress SW1[]=

InetAddress.getAllByName("www.google.com");

for (int i=0; i<SW1.length; i++)

System.out.println(SW1[i]);

System.out.println();

System.out.println("Details

'www.sinhgad.com' getByName(): ");

InetAddress

SW2[]=InetAddress.getAllByName("www.sinhgad.c

om");

for (int i=0; i<SW2.length; i++)

System.out.println(SW2[i]);

}}

**Exp 7**

Programs:

For html page:

<!DOCTYPE html>

<html>

<head>

<meta charset="ISO-8859-1">

<title>Input Page</title>

</head>

<body>

<form action="Login\_Servlet" method="post">

<h1>Login</h1>

<label>Username</label>

<input type="text" name="username">

<br><br>

<label>Password</label>

<input type="password" name="password">

<br><br>

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

</form>

</body>

</html>

JDBCDao java program:

import java.sql.\*;

public class JDBCDao { public ResultSet

checkUserData(String str){

String driver = "com.mysql.cj.jdbc.Driver";

String url = "jdbc:mysql://localhost:3306/exp7";

String user = "root";

String pass = "Avish@101";

ResultSet rs = null;

try{

Class.forName(driver);

Connection con =

DriverManager.getConnection(url,user,pass);

String query = "SELECT \* FROM UserInfo WHERE

username=?";

PreparedStatement

pstmt=con.prepareStatement(query);

pstmt.setString(1, str);

rs=pstmt.executeQuery();

}catch(Exception e){

System.out.println(e);

}

return rs;

}

}

Servlet Program:

import java.sql.\*; import

jakarta.servlet.ServletException; import

jakarta.servlet.annotation.WebServlet; import

jakarta.servlet.http.HttpServlet; import

jakarta.servlet.http.HttpServletRequest; import

jakarta.servlet.http.HttpServletResponse; import

java.io.IOException;

/\*\*

\* Servlet implementation class Login\_Servlet

\*/ public class Login\_Servlet extends HttpServlet {

private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/ public

Login\_Servlet() {

super();

// TODO Auto-generated constructor stub

}

/\*\*

\* @see HttpServlet#doGet(HttpServletRequest request,

HttpServletResponse response)

\*/ protected void doGet(HttpServletRequest request,

HttpServletResponse

response) throws ServletException, IOException { //

TODO Auto-generated method stub

response.getWriter().append("Served at:

").append(request.getContextPath());

}

/\*\*

\* @see HttpServlet#doPost(HttpServletRequest request,

HttpServletResponse response)

\*/ protected void doPost(HttpServletRequest request,

HttpServletResponse

response) throws ServletException, IOException { //

TODO Auto-generated method stub

doGet(request, response);

System.out.println("Servlet Called...");

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

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

response.getWriter().print("Client: Username - " + username);

response.getWriter().print("<br>");

response.getWriter().print("Client: Password - " +

password);

response.getWriter().print("<br><br>");

String un="";

String pas="";

JDBCDao ud = new JDBCDao();

ResultSet rs = ud.checkUserData(username);

System.out.println("ResultSet = " + rs);

// Inside your doPost method after retrieving data from the

database

boolean credentialsMatch = false;

try {

while(rs.next()) {

response.getWriter().print("Server: Username - " +

rs.getString(1));

un = rs.getString(1);

response.getWriter().print("<br>");

response.getWriter().print("Server: Password - " + rs.getString(2));

pas = rs.getString(2);

// Comparing usernames and passwords if

(pas.equals(password) && un.equals(username)) {

credentialsMatch = true;

System.out.println("Username and Password Matched");

break; // No need to continue once matched

}

}

if (credentialsMatch) {

response.getWriter().print("<br><br>");

response.getWriter().print("Username and Password

Matched!");

} else {

response.getWriter().print("<br><br>");

response.getWriter().print("Username and Password did not match.");

}

} catch (SQLException e) {

e.printStackTrace();

}

}

}

**Exp 8**

import

java.util.Scanner; import

java.sql.\*;

public class Exp\_08 { public static void

main(String[] args) {

String driver = "com.mysql.cj.jdbc.Driver";

String username = "root";

String password = "061304";

String url = "jdbc:mysql://localhost:3306/College2";

try {

Class.forName(driver);

Connection con = DriverManager.getConnection(url, username,

password);

Statement stmt = con.createStatement();

String q1 = "insert into Student2

values(101,'Kalpana','Kalpanajoshi@gmail.com',9843453626)";

String q2 = "select \*from Student2";

String q3 = "update Student2 set Mobile = 8982127123 where

Name = 'Kalpana'";

String q4 = "delete from Student2 where Roll\_No = 101";

boolean continueloop = true;

do {

System.out.print("Enter your Choice: ");

Scanner sc = new Scanner(System.in);

int choice = sc.nextInt();

switch(choice){

case 1:

System.out.println("Insert Values into Table:");

stmt.execute(q1);

System.out.println("Data inserted

successfully.");

break;

case 2:

System.out.println("Read Values from Table:");

ResultSet rs = stmt.executeQuery(q2);

System.out.println("Roll\_No Name Email

Mobile");

while(rs.next()) {

System.out.println(rs.getInt("Roll\_No") +"

"+ rs.getString("Name") + " " +

rs.getString("Email") + " " + rs.getLong("Mobile") );

}

break

case 3:

System.out.println("Update the Table");

stmt.executeUpdate(q3);

System.out.println("Data updated successfully");

break;

case 4:

System.out.println("Delete Values from Table:");

stmt.execute(q4);

System.out.println("Data deleted successfully.");

break;

default:

System.out.print("Invaild Choice");

break;

}

if(continueloop) {

System.out.println("Do you really want to continue (Y/N)

?");

String response = sc.next();

if (response== "Y") {

continueloop = false;

}

}

}while(continueloop);

}catch(ClassNotFoundException | SQLException e) {

e.printStackTrace();

}}

}

**Exp 9**

Html Program:

<!DOCTYPE html>

<html>

<head>

<meta charset="ISO-8859-1">

<title>Input Webpage</title>

</head>

<body>

<form action="Exp9\_cube.jsp">

<label>Enter the number : </label>

<input type="text" name="un">

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

<br>

</form>

</body>

</html>

Jsp Program:

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

<!DOCTYPE html>

<html>

<head>

<meta charset="ISO-8859-1">

<title>Output WebPage</title>

</head>

<body>

<h1>Welcome to JSP</h1>

<br>

<%

String n = request.getParameter("un");

int no = Integer.parseInt(n); out.println("Number Entered is : " + no);

out.println("<br> <br>");

out.println("Cube of Number : " + no\*no\*no);

%>

</body>

</html>

**Exp 10**

HTML page:

<!DOCTYPE html>

<html>

<head>

<meta charset="ISO-8859-1">

<title>Inpute html webpage</title>

</head>

<body>

<form action="Servlet\_file" method="post">

<h1>Registration Details</h1>

<label>Username</label>

<input type="text" name="username">

<br><br>

<label>Password</label>

<input type="password" name="password">

<br><br>

<label>Email Id</label>

<input type="email" name="email">

<br><br>

<label>Country</label>

<input type="text" name="country">

<br><br>

<input type="submit" value="Register"><br/>

</body>

</html>

Servlet Program:

import java.sql.\*;

import jakarta.servlet.ServletException; import

jakarta.servlet.annotation.WebServlet; import

jakarta.servlet.http.HttpServlet; import

jakarta.servlet.http.HttpServletRequest; import

jakarta.servlet.http.HttpServletResponse; import

java.io.IOException;

/\*\*

\* Servlet implementation class Servlet\_file

\*/ public class Servlet\_file extends HttpServlet {

private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/ public

Servlet\_file() {

super();

// TODO Auto-generated constructor stub

}

/\*\*

\* @see HttpServlet#doGet(HttpServletRequest request,

HttpServletResponse response)

\*/ protected void doGet(HttpServletRequest request,

HttpServletResponse

response) throws ServletException, IOException { //

TODO Auto-generated method stub

response.getWriter().append("Served at:

").append(request.getContextPath());

}

/\*\*

\* @see HttpServlet#doPost(HttpServletRequest request,

HttpServletResponse response)

\*/ protected void doPost(HttpServletRequest request,

HttpServletResponse

response) throws ServletException, IOException {

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

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

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

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

System.out.println(username);

try {

RegistrationDao regdao = new RegistrationDao();

regdao.createUser(username, password, email, country);

response.getWriter().print("User Registered Successfully");

} catch (SQLException e) {

e.printStackTrace();

response.getWriter().print("An error occurred while registering user");

}

}

}

DAO class Program:

import java.sql.\*;

public class RegistrationDao {

private static final String DRIVER = "com.mysql.cj.jdbc.Driver"; private

static final String URL = "jdbc:mysql://localhost:3306/EXP10"; private

static final String USER = "root"; private static final String PASSWORD

= "avish@101";

private static final String INSERT\_QUERY = "INSERT INTO exp10T (user,

password, email, country) VALUES (?, ?, ?, ?)";

public void createUser(String usr, String password, String email, String

country) throws SQLException {

Connection con = null;

PreparedStatement pstmt = null;

try {

Class.forName(DRIVER);

con = DriverManager.getConnection(URL, USER, PASSWORD); pstmt

= con.prepareStatement(INSERT\_QUERY);

pstmt.setString(1, usr);

pstmt.setString(2, password);

pstmt.setString(3, email);

pstmt.setString(4, country);

pstmt.executeUpdate();

System.out.println("User Registered Successfully");

} catch (ClassNotFoundException | SQLException e) {

// Log the exception or throw it to the caller // You

might want to throw a custom exception here

e.printStackTrace();

throw new SQLException("Error in database operation", e);

} finally {

// Close resources in reverse order

if (pstmt != null) { try {

pstmt.close();

} catch (SQLException e) {

e.printStackTrace();

}

}

if (con != null) {

try {

con.close();

} catch (SQLException e) {

e.printStackTrace();

}

}

}

}

}

**Exp 11**

Program:

Login Page:

<!DOCTYPE html>

<html>

<head>

<meta charset="ISO-8859-1">

<title>Login Page</title>

</head>

<body>

<h2>Login</h2>

<form action="LoginServlet" method="post">

<label for="username">Username:</label><br>

<input type="text" id="username" name="username"><br><br>

<label for="password">Password:</label><br>

<input type="password" id="password" name="password"><br><br>

<input type="submit" value="Login">

</form>

</body>

</html>

Profile Page:

<!DOCTYPE html>

<html>

<head>

<meta charset="ISO-8859-1">

<title>Profile Page</title>

</head>

<body>

<body>

<h2>Welcome, User!</h2>

<!-- Display user profile information here -->

<br><br>

<a href="logout.html">Logout</a>

</body>

</html>

Logout Page:

<!DOCTYPE html>

<html>

<head>

<meta charset="ISO-8859-1">

<title>Logout Page</title>

</head>

<body>

<h2>Logout Successful</h2>

<p>You have been logged out.</p>

</body>

</html>

Login Servlet :

import jakarta.servlet.ServletException;

import jakarta.servlet.annotation.WebServlet;

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.sql.\*;

/\*\*

\* Servlet implementation class LogiServlet

\*/

public class LoginServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

// JDBC database URL, username, and password

private static final String JDBC\_URL = "jdbc:mysql://localhost:3306/exp11";

private static final String DB\_USER = "root";

private static final String DB\_PASSWORD = "Avish@101";

/\*\*

\* Default constructor.

\*/

public LoginServlet() {

super();

// TODO Auto-generated constructor stub

}

/\*\*

\* @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)

\*/

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

// TODO Auto-generated method stub

response.getWriter().append("Served at: ").append(request.getContextPath());

}

/\*\*

\* @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)

\*/

protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

// TODO Auto-generated method stub

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

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

// Check if username and password are valid (for demo, hardcoded validation)

if (validateLogin(username, password)) {

// Create a session if valid

HttpSession session = request.getSession();

session.setAttribute("username", username);

// Redirect to Home menu

response.sendRedirect("profile.html");

} else {

// Redirect back to login page with error message

response.sendRedirect("login.html?error=invalid");

}

}

private boolean validateLogin(String username, String password) {

try {

// Load the MySQL JDBC driver

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

// Establish a connection

Connection conn = DriverManager.getConnection(JDBC\_URL, DB\_USER, DB\_PASSWORD);

// Prepare a SQL query to retrieve the password for the provided username

String sql = "SELECT password FROM userInfo WHERE username = ?";

PreparedStatement statement = conn.prepareStatement(sql);

statement.setString(1, username);

// Execute the query

ResultSet resultSet = statement.executeQuery();

// If a matching record is found and passwords match, return true

if (resultSet.next()) {

String dbPassword = resultSet.getString("password");

return password.equals(dbPassword);

}

// Close resources

resultSet.close();

statement.close();

conn.close();

} catch (ClassNotFoundException | SQLException e) {

e.printStackTrace();

}

return false;

}

}

Logout Servlet:

import jakarta.servlet.ServletException;

import jakarta.servlet.annotation.WebServlet;

import jakarta.servlet.http.HttpServlet;

import jakarta.servlet.http.HttpServletRequest;

import jakarta.servlet.http.HttpServletResponse;

import jakarta.servlet.http.HttpSession;

import java.io.IOException;

/\*\*

\* Servlet implementation class LogoServlet

\*/

public class LogoutServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public LogoutServlet() {

super();

// TODO Auto-generated constructor stub

}

/\*\*

\* @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)

\*/

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

processLogout(request, response);

}

/\*\*

\* @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)

\*/

protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

// TODO Auto-generated method stub

doGet(request, response);

}

private void processLogout(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

// Invalidate session and redirect to login page

HttpSession session = request.getSession(false);

if (session != null) {

session.invalidate(); // Invalidate the session

}

response.sendRedirect("login.html");

}

}