// Write a java program that connects to the Employee (ID, FName. LName, Project, Salary)

// database using JDBC and perform the following operations.

// i. Display details of all the Employees.

// ii. Display details of all the employees who work for project “Web Development”.

// iii. Display the IDs of all those employee who have salary above 75,000/- and are in “Web

// Development”.

// iv. Display the total Number of employees who have salary less than 50,000/-.

import java.sql.\*;

public class prog1 {

public static void main(String args[]){

Connection con=null;

Statement st=null;

ResultSet rs=null;

String query;

try{

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

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

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

st=con.createStatement();

// i. Display details of all the Employees.

query="select \* from Employee";

System.out.println(query);

rs=st.executeQuery(query);

while(rs.next()){

System.out.print(rs.getString(1)+"\t");

System.out.print(rs.getString(2)+"\t");

System.out.print(rs.getString(3)+"\t");

System.out.print(rs.getString(4)+"\t");

System.out.println(rs.getInt(5)+"\t");

}

rs.close();

System.out.println();

// ii. Display details of all the employees who work for project “Web Development”.

query="select \* from Employee where project='Web Development'";

System.out.println(query);

rs=st.executeQuery(query);

while(rs.next()){

System.out.print(rs.getString(1)+"\t");

System.out.print(rs.getString(2)+"\t");

System.out.print(rs.getString(3)+"\t");

System.out.print(rs.getString(4)+"\t");

System.out.println(rs.getInt(5)+"\t");

}

System.out.println();

// iii. Display the IDs of all those employee who have salary above 75,000/- and are in “Web Development”.

query="select \* from Employee where salary>75000 and project='Web Development'";

System.out.println(query);

rs=st.executeQuery(query);

while(rs.next()){

System.out.print(rs.getString(1)+"\t");

System.out.print(rs.getString(2)+"\t");

System.out.print(rs.getString(3)+"\t");

System.out.print(rs.getString(4)+"\t");

System.out.println(rs.getInt(5)+"\t");

}

System.out.println();

// iv. Display the total Number of employees who have salary less than 50,000/-.

query="select count(ID) from Employee where salary<50000";

System.out.println(query);

rs=st.executeQuery(query);

rs.next();

System.out.println("Total number of employees who have salary > 50000 are : "+rs.getInt(1));

// int count=Integer.parseInt(rs);

}

catch(SQLException se){

System.out.println(se);

}

catch(Exception e){

System.out.println(e.getMessage());

}

finally{

try{

if(con!=null) con.close();

if(rs!=null) rs.close();

if(st!=null) st.close();

}catch(SQLException se){

System.out.println(se);

}

}

}

}

// Write a java program that connects to a Department (Dept\_ID, Name, Year\_Established,

// Head\_Name, No\_of\_Employees) database using JDBC and perform the following.

// i. Display details of all the Departments using Statement Object.

// ii. Display details of all the Departments which are established in the year 2000 using

// PreparedStatement object. Read the value from the user and display appropriate messages.

// iii. Display details of all the Departments by reading Dept\_ID and Department Name from

// the user using PreparedStatement object.

// iv. Insert a new row using PreparedStatement object. Display the details.

import java.sql.\*;

import java.util.Scanner;

public class proj2 {

public static void main(String[] args) {

Connection con=null;

Statement st=null;

ResultSet rs=null;

PreparedStatement ps=null;

String query;

Scanner sc=new Scanner(System.in);

try{

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

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

st=con.createStatement();

// i. Display details of all the Departments using Statement Object.

query="select \* from Department";

System.out.println(query);

rs=st.executeQuery(query);

while(rs.next()){

System.out.print(rs.getInt("Dept\_ID")+"\t");

System.out.print(rs.getString(2)+"\t");

System.out.print(rs.getInt(3)+"\t");

System.out.print(rs.getString(4)+"\t");

System.out.println(rs.getInt(5)+"\t");

}

System.out.println();

rs.close();

// ii. Display details of all the Departments which are established in the year 2000 using PreparedStatement object.

// Read the value from the user and display appropriate messages.

query="select \* from Department where Year\_Established=2000";

System.out.println(query);

ps=con.prepareStatement(query);

rs=ps.executeQuery();

while(rs.next()){

System.out.print(rs.getInt("Dept\_ID")+"\t");

System.out.print(rs.getString(2)+"\t");

System.out.print(rs.getInt(3)+"\t");

System.out.print(rs.getString(4)+"\t");

System.out.println(rs.getInt(5)+"\t");

}

System.out.println();

ps.close();

// iii. Display details of all the Departments by reading Dept\_ID and Department Name from the user using PreparedStatement object.

int dept\_id=sc.nextInt();

sc.nextLine();

String dept\_name=sc.nextLine();

query="select \* from Department where Dept\_ID=? and Name=?";

System.out.println(query);

ps=con.prepareStatement(query);

ps.setInt(1,dept\_id);

ps.setString(2,dept\_name);

rs=ps.executeQuery();

while(rs.next()){

System.out.print(rs.getInt("Dept\_ID")+"\t");

System.out.print(rs.getString(2)+"\t");

System.out.print(rs.getInt(3)+"\t");

System.out.print(rs.getString(4)+"\t");

System.out.println(rs.getInt(5)+"\t");

}

System.out.println();

ps.close();

// iv. Insert a new row using PreparedStatement object. Display the details.

query="insert into Department values(003,'ISE', 2011,'DEF',30)";

ps=con.prepareStatement(query);

int count=ps.executeUpdate();

System.out.println("Updated "+count+" records");

}catch(ClassNotFoundException ce){

System.out.println(ce);

}

catch(SQLException se){

System.out.println(se);

}

catch(Exception e){

System.out.println(e);

}

finally{

try{

if(con!=null) con.close();

if(rs!=null) rs.close();

if(st!=null) st.close();

if(ps!=null) ps.close();

}

catch(SQLException see){

System.out.println(see);

}

}

}

}

// Write a java program that connects to the Movies (ID, Movie\_Name, Genre, IMDB\_Rating,

// Year) database using JDBC. Create an Updatable ResultSet and perform the following

// operations.

// i. Display details of all the Movies from the table.

// ii. Display details of 5th Movie from the table.

// iii. Insert a new row into the table using PreparedStatement and display all the details.

// iv. Delete a row from the table where the IMDB\_Rating is less than 5.

// v. Update the Genre of a movie with ID as 10 to “Sci-fi”.

import java.sql.\*;

public class proj3 {

public static void main(String[] args) {

Connection con=null;

PreparedStatement ps=null;

ResultSet rs=null;

String query;

int count;

try{

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

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

// i. Display details of all the Movies from the table.

query="select \* from Movies";

System.out.println(query);

ps=con.prepareStatement(query);

rs=ps.executeQuery();

while(rs.next()){

System.out.print(rs.getInt(1));

System.out.print(rs.getString(2));

System.out.print(rs.getString(3));

System.out.print(rs.getInt(4));

System.out.println(rs.getString(5));

}

System.out.println();

ps.close();

rs.close();

// ii. Display details of 5th Movie from the table.

query="select \* from Movies limit 1 offset 4";

System.out.println(query);

ps=con.prepareStatement(query);

rs=ps.executeQuery();

while(rs.next()){

System.out.print(rs.getInt(1));

System.out.print(rs.getString(2));

System.out.print(rs.getString(3));

System.out.print(rs.getInt(4));

System.out.println(rs.getString(5));

}

System.out.println();

// iii. Insert a new row into the table using PreparedStatement and display all the details.

query="insert into Movies values(11,'fgh','drama',8,2019)";

System.out.println(query);

ps=con.prepareStatement(query);

count=ps.executeUpdate();

System.out.println("Inserted "+count+" rows");

// iv. Delete a row from the table where the IMDB\_Rating is less than 5.

query="delete from Movies where IMDB\_Rating<5 limit 1";

System.out.println(query);

ps=con.prepareStatement(query);

count=ps.executeUpdate();

System.out.println("Deleted "+count+" rows");

// v. Update the Genre of a movie with ID as 10 to “Sci-fi”.

query="update Movies set Genre='Sci-fi' where ID=10";

System.out.println(query);

ps=con.prepareStatement(query);

count=ps.executeUpdate();

System.out.println("Updated "+count+" rows");

}catch(Exception e){

System.out.println(e);

}

finally{

try{

if(con!=null) con.close();

if(ps!=null) ps.close();

if(rs!=null) rs.close();

}catch(SQLException se){

System.out.println(se);

}

}

}

}

//Write a java servlet program to implement a webpage to check if the voter is eligible or not.

//User will enter his first name, last name, email id and date of birth.

//check if he is eligible to vote or not. Validate the page before displaying the details.

import java.io.\*;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.\*;

@WebServlet("/vote")

public class prog5 extends HttpServlet{

public void doGet(HttpServletRequest req,HttpServletResponse res) throws IOException{

String fname=req.getParameter("fname");

String lname=req.getParameter("lname");

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

String dob=req.getParameter("dob");

int year=Integer.parseInt(dob.substring(0,4));

PrintWriter out=res.getWriter() ;

int age=2022-year;

if(age<18) {

out.println("not eligible");

}

else {

out.println("eligible");

}

}

}

Vote.html

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8">

<title>Insert title here</title>

</head>

<body>

<form method='get' action='vote'>

fname:<input type='text' name="fname">

lname:<input type='text' name="lname">

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

dob:<input type='date' name='dob'>

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

</form>

</body>

</html>

//Write a java servlet program to calculate the CGPA.

//Read the USN, Name, SGPA of previous 4 semesters from user in an HTML page.

//Calculate the CGPA and display the details using a Servlet class.

import java.io.\*;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.\*;

@WebServlet("/cgpa")

public class proj6 extends HttpServlet{

public void doGet(HttpServletRequest req,HttpServletResponse res) throws IOException{

String usn=req.getParameter("usn");

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

double s1=Double.parseDouble(req.getParameter("s1"));

double s2=Double.parseDouble(req.getParameter("s2"));

double s3=Double.parseDouble(req.getParameter("s3"));

double s4=Double.parseDouble(req.getParameter("s4"));

double cgpa=(s1+s2+s3+s4)/4;

PrintWriter out=res.getWriter() ;

out.println(usn+"\t"+name+"\t"+"cgpa "+"\t"+cgpa);

}

}

cgpa.html

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8">

<title>Insert title here</title>

</head>

<body>

<form method="get" action='cgpa'>

usn:<input type='text' name='usn'>

name:<input type='text' name='name'>

s1:<input type='text' name='s1'>

s2:<input type='text' name='s2'>

s3:<input type='text' name='s3'>

s4:<input type='text' name='s4'>

<input type='submit' name='submit'>

</form>

</body>

</html>

//Write a java servlet program that reads either area name or phone no.

//of police station of and displays details of the police station.

//Use a HTML file to read the input and display the output using a Servlet class.

//Create police\_station table with appropriate fields like Station\_ID, Area\_Name,

//Phone\_Number and Address.

import java.io.\*;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.\*;

import java.sql.\*;

@WebServlet("/police")

public class proj9 extends HttpServlet{

public void doGet(HttpServletRequest req,HttpServletResponse res) throws IOException{

String area=req.getParameter("area");

String phno=req.getParameter("phno");

String query;

Connection con=null;

Statement st=null;

ResultSet rs=null;

PrintWriter out=res.getWriter() ;

try {

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

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

query="select \* from Police where Area\_Name = '"+area+"' and Phone\_Number= '"+phno+"'";

System.out.println(query);

st=con.createStatement();

rs=st.executeQuery(query);

while(rs.next()) {

out.println(rs.getString(1));

out.println(rs.getString(2));

out.println(rs.getString(3));

out.println(rs.getString(4));

}

}catch(Exception e) {

System.out.println(e);

}

}

}

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8">

<title>Insert title here</title>

</head>

<body>

<form method='get' action='police'>

area:<input type='text' name='area'>

phno:<input type='text' name='phno'>

<input type='submit' name='submit'>

</form>

</body>

</html>