Institute of Computer Technology
B. Tech Computer Science and Engineering
Subject: OOP (2CSE303)
ASSIGNMENT-2

1. Aashvi was assigned to create a registration portal for a college-based application with the following requirements: enrollment number, student name, marks for subject 1, subject 2 and subject 3 along with the computation of average of the three subject marks. The details entered within the registration portal should be stored within a table 'StudentData' through JDBC.

Input: Enrollment number, student name, subject marks1, subject marks2, subject marks3

Output: Average of the three subject marks, insertion of the records within the table.

SOLUTION

```java
package assignment2;

/**
 *
 * @author YashPrajapati
 */
import java.sql.*;
import java.util.*;

public class A2Q1 {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        String create, insert, id, name;
        int i, n;
        double mark1, mark2, mark3, avg;
        try {
            Class.forName("com.mysql.jdbc.Driver");
            Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/oop_assign2", "root", "");
            create = "create table StudentPortal(enroll varchar(20),name varchar(20),mark1 double(10,2),mark2 double(10,2),mark3 double(10,2),Avg double(10,2))";
```

```java
                    PreparedStatement obj = con.prepareStatement(create);
                    obj.execute();
                    insert = "insert into StudentPortal values(?,?,?,?,?,?)";
                    PreparedStatement obj1 = con.prepareStatement(insert);
                    System.out.print("Enter number of Data ypu want to
insert:");
                    n = sc.nextInt();
                    for (i = 0; i < n; i++) {
                        System.out.print("Enter Enrollment number:");
                        id = sc.next();
                        System.out.print("Enter Name:");
                        name = sc.next();
                        System.out.print("Enter marks of subject 1:");
                        mark1 = sc.nextDouble();
                        System.out.print("Enter marks of subject 2:");
                        mark2 = sc.nextDouble();
                        System.out.print("Enter marks of subject 3:");
                        mark3 = sc.nextDouble();
                        avg = (mark1 + mark2 + mark3) / 3;
                        obj1.setString(1, id);
                        obj1.setString(2, name);
                        obj1.setDouble(3, mark1);
                        obj1.setDouble(4, mark2);
                        obj1.setDouble(5, mark3);
                        obj1.setDouble(6, avg);
                        obj1.executeUpdate();
                        System.out.println("Student-" + (i + 1) + " average:" +
avg);

                        System.out.println("Data inserted to table");
                    }
                    obj1.close();
                    obj.close();
                    con.close();
                    sc.close();
            } catch (Exception e) {
                    System.out.print(e);
            }
        }
    }
```

}
OUTPUT

```
Output - Assignment2 (run)

run:
Enter number of Data ypu want to insert:3
Enter Enrollment number:1
Enter Name:Yash
Enter marks of subject 1:30
Enter marks of subject 2:45
Enter marks of subject 3:49
Student-1 average:41.333333333333336
Data inserted to table
Enter Enrollment number:2
Enter Name:Arth
Enter marks of subject 1:31
Enter marks of subject 2:32
Enter marks of subject 3:33
Student-2 average:32.0
Data inserted to table
Enter Enrollment number:3
Enter Name:Dev
Enter marks of subject 1:36
Enter marks of subject 2:39
Enter marks of subject 3:34
Student-3 average:36.333333333333336
Data inserted to table
BUILD SUCCESSFUL (total time: 1 minute 2 seconds)
```

Assignment2.java ×   A2Q1.java ×   SQL 1 [jdbc:mysql://localhost:33...] ×

Connection: jdbc:mysql://localhost:3306/prac23db [root on Default schema]

```
1   USE oop_assign2;
2   select * from StudentPortal;
```

select * from StudentPort... ×

Max. rows: 100   Fetched Rows: 3

#	enroll	name	mark1	mark2	mark3	Avg
1	1	Yash	30	45	49	41.33
2	2	Arth	31	32	33	32
3	3	Dev	36	39	34	36.33

2. As a team member of the project development team, Aradhana was assigned the task to develop a login portal wherein if the enrollment number entered matches with any of the student enrollments registered,

then the details of respective students such as marks and average of marks should be displayed through JDBC.
Input: Enrollment number
Output: Record fetched based on enrollment number
SOLUTION

```java
package assignment2;

/**
 *
 * @author YashPrajapati
 */

import java.sql.*;
import java.util.*;

public class A2Q2 {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        String find;
        int enrollment;
        try {
            Class.forName("com.mysql.jdbc.Driver");
            Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/oop_assign2", "root", "");

            System.out.print("Enter enrollment number whose details you want to display:");
            enrollment = sc.nextInt();
            find = "select * from StudentPortal where enroll=" + enrollment;

            PreparedStatement obj = con.prepareStatement(find);
            ResultSet rs = obj.executeQuery();
            while (rs.next()) {
                System.out.println(rs.getInt(1) + " " + rs.getString(2) + " " + rs.getDouble(3) + " " + rs.getDouble(4)
                        + " " + rs.getDouble(5) + " " +
rs.getDouble(6));
```
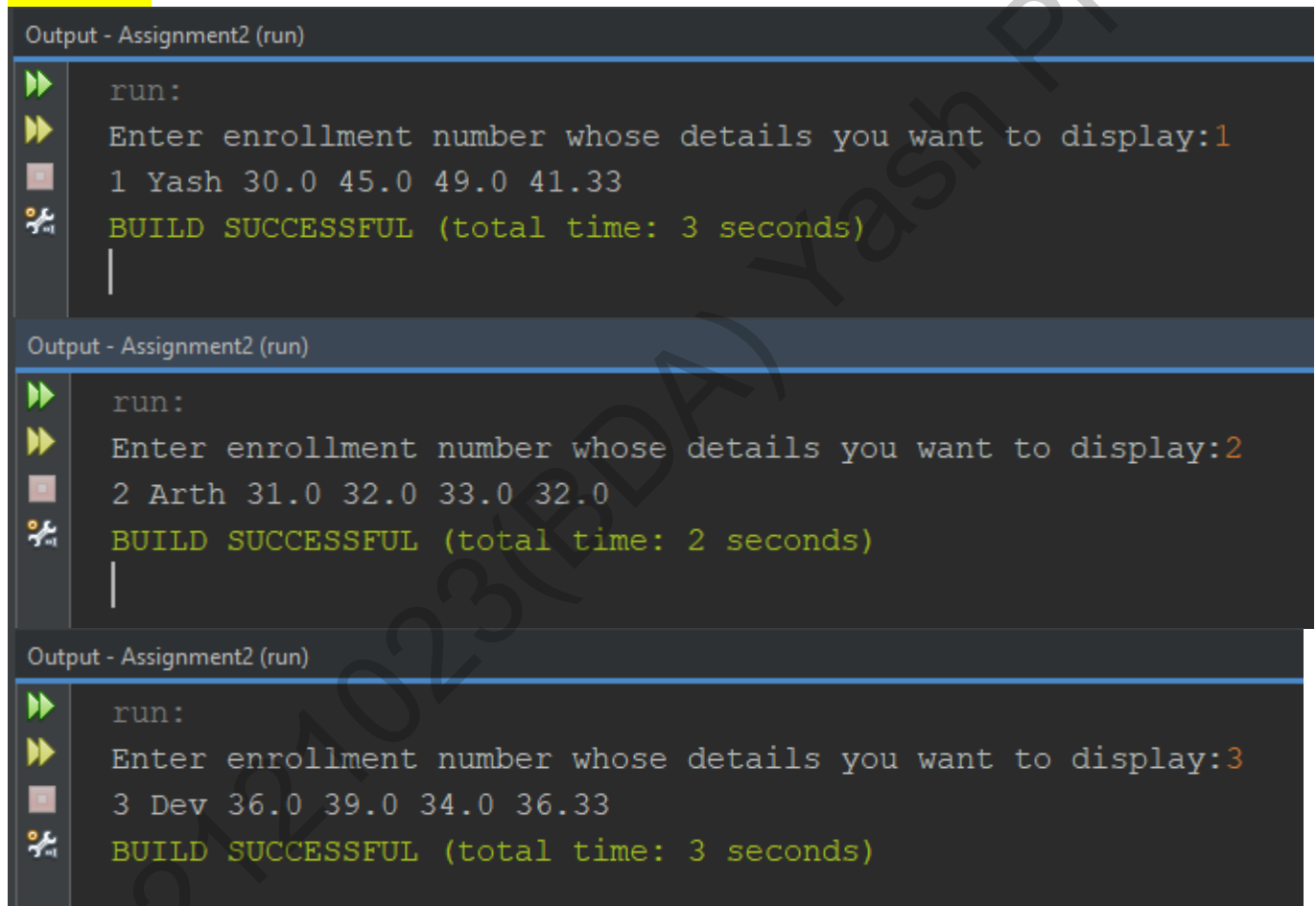
```
                }
                obj.close();
                con.close();
                sc.close();
        } catch (Exception e) {
                System.out.println(e);
        }
    }
}
```

OUTPUT

```
Output - Assignment2 (run)
  run:
  Enter enrollment number whose details you want to display:1
  1 Yash 30.0 45.0 49.0 41.33
  BUILD SUCCESSFUL (total time: 3 seconds)
```

```
Output - Assignment2 (run)
  run:
  Enter enrollment number whose details you want to display:2
  2 Arth 31.0 32.0 33.0 32.0
  BUILD SUCCESSFUL (total time: 2 seconds)
```

```
Output - Assignment2 (run)
  run:
  Enter enrollment number whose details you want to display:3
  3 Dev 36.0 39.0 34.0 36.33
  BUILD SUCCESSFUL (total time: 3 seconds)
```