

**Rollno: Te31413**

**Assignment 8**

**Aim:**

**Database Connectivity: Write a program to implement MySQL/Oracle database connectivity with any front end language to implement Database navigation operations (add, delete, edit etc.)**

```
package data;

import java.sql.*;
import java.util.Scanner;
import static java.lang.System.exit;

public class Crud{

    public static void createData(){

        final String url = "jdbc:mysql://10.10.13.97:3306/te31413_db";

        final String uname = "te31413";
        final String pass = "te31413";
        Scanner sc = new Scanner(System.in);

        System.out.print("\t\tEnter Roll number : ");
        int id = sc.nextInt();
        System.out.print("\t\tEnter name : ");
        String name = sc.next();
        System.out.print("\t\tEnter marks : ");
        int marks = sc.nextInt();

        String query="INSERT INTO Student (rollno, name,marks) values
        ("'+id+'","'+name+'","'+marks+'")";
        Connection con;

        try{
            con=DriverManager.getConnection(url,uname,pass);
            Statement stmt = con.createStatement();
            int rows = stmt.executeUpdate(query);
            if(rows==1) {
                System.out.println("\t\t rows affected....");
            }else {
                System.out.println("\t\tSomething is Wrong.....!! ");
            }
        }
        menu();
    }
}
```

```

    } catch (Exception e) {
        e.printStackTrace();
    }
}

public static void readData(){

    final String url = "jdbc:mysql://10.10.13.97:3306/te31413_db";

    final String uname = "te31413";
    final String pass = "te31413";
    String query = "select * from Student";

    Connection con;
    try {
        con = DriverManager.getConnection(url, uname, pass);
        Statement st = con.createStatement();
        ResultSet rs = st.executeQuery(query);
        while(rs.next()) {
            int id = rs.getInt("rollno");
            String name = rs.getString("name");
            int marks = rs.getInt("marks");

            System.out.println("\t\t\tStudent ID : "+id+"   Name -->> "+name+"       Marks -->> "+marks);
        }
        menu();

    } catch (Exception e) {
        e.printStackTrace();
    }

}

public static void deleteData(){

    final String url = "jdbc:mysql://10.10.13.97:3306/te31413_db";

    final String uname = "te31413_db";
    final String pass = "te31413";
    System.out.print("\t\t\tEnter Roll number : ");
    Scanner sc = new Scanner(System.in);
    int id = sc.nextInt();
    String query = "DELETE FROM Student where rollno ='"+id+"' ";

    Connection con;
    try{
        con = DriverManager.getConnection(url,uname,pass);
        Statement stmt = con.createStatement();
        int rows = stmt.executeUpdate(query);

```

```

        if(rows==1) {
            System.out.println("\t\t\t rows affected....");
        }else {
            System.out.println("\t\t\t enter correct roll number.....!! ");
            deleteData();
        }
        menu();

    }catch (Exception e){
        e.printStackTrace();
    }
}

```

```

public static void updateData(){

```

```

    final String url = "jdbc:mysql://10.10.13.97:3306/te31413_db";

```

```

    final String uname = "te31413";
    final String pass = "te31413";
    String query = null;
    Scanner sc = new Scanner(System.in);
    System.out.println("\t\t\t1 - Roll no. Updates");
    System.out.println("\t\t\t2 - Name Updates");
    System.out.println("\t\t\t3 - Marks Updates");
    System.out.print("\t\t Choose Option to Updates data -->> ");
    int opt = sc.nextInt();
    if(opt==1){
        System.out.print("\n\t\t\tEnter name of : ");
        String name = sc.next();
        System.out.print("\t\t\tEnter Roll number : ");
        int id = sc.nextInt();
        query = "UPDATE Student SET rollno='"+id+"' where name='"+name+"' ";
    }else if(opt==2){
        System.out.print("\n\t\t\tEnter Roll number : ");
        int id = sc.nextInt();
        System.out.print("\t\t\tEnter Names to Updates : ");
        String name = sc.next();
        query = "UPDATE Student SET name='"+name+"' where rollno='"+id+"' ";
    }

```

```

    else if(opt==3){
        System.out.print("\n\t\t\tEnter Roll number : ");
        int id = sc.nextInt();
        System.out.print("\t\t\tEnter marks to updates : ");
        int marks=sc.nextInt()
;        query = "UPDATE Student SET marks='"+marks+"' where rollno='"+id+"' ";
    }

```

```

    else {
        System.out.println("\n\t\t\tChoose correct option .....");
        updateData();
    }
}

```

```

    }
    Connection con;
    try{
        con = DriverManager.getConnection(url,uname,pass);
        Statement stmt = con.createStatement();
        int rows = stmt.executeUpdate(query);
        if(rows==1) {
            System.out.println("\t\t\t\t rows affected....");
        }else {
            System.out.println("\t\t\t enter correct data .....!! ");
            updateData();
        }
        menu();
    }catch (Exception e){
        e.printStackTrace();
    }
}

public static void menu() {
    System.out.println("\n\n\t\t\t ----- CRUD OPERATION USING JAVA ----- \n");
    System.out.println("\t\t\t1 - Create Data ");
    System.out.println("\t\t\t2 - Read Data ");
    System.out.println("\t\t\t3 - Update Data ");
    System.out.println("\t\t\t4 - Delete Data ");
    System.out.println("\t\t\t5 - Exit");
    System.out.print("\t\t Select Option ---->>> ");
    Scanner sc = new Scanner(System.in);
    int select= sc.nextInt();
    switch (select) {
        case 1 -> {
            System.out.println("\n\n ----- Create Data Carefully ----- \n");
            createData();
        }
        case 2 -> {
            System.out.println("\n\n----- Data contains----- \n");
            readData();
        }
        case 3 -> {
            System.out.println("\n\n ----- Updates Data ----- \n");
            updateData();
        }
        case 4 -> {
            System.out.println("\n\n ----- Delete Data ----- \n");
            deleteData();
        }
        case 5 -> {
            System.out.println("\t\t\t\t\t Exiting....\n \t\t\t\t\t ");
            exit(0);
        }
        default -> {
            System.out.println("Wrong Option...!");
            menu();
        }
    }
}

```

```

    }
}

}

public static void main(String[] args) {
    menu();
}
}

```

```

----- CRUD OPERATION USING JAVA -----

1 - Create Data
2 - Read Data
3 - Update Data
4 - Delete Data
5 - Exit
Select Option ---->>> 2

----- Data contains-----

Sudent ID : 1 Name -->> Siddhi      Marks -->> 990
Sudent ID : 2 Name -->> Anushree    Marks -->> 1300
Sudent ID : 3 Name -->> Dhanashree  Marks -->> 950
Sudent ID : 4 Name -->> jon         Marks -->> 720
Sudent ID : 5 Name -->> shree       Marks -->> 350
Sudent ID : 6 Name -->> shreeraj    Marks -->> 150
Sudent ID : 7 Name -->> aany        Marks -->> 300
Sudent ID : 8 Name -->> jon         Marks -->> 250
Sudent ID : 10 Name -->> bob        Marks -->> 200

----- CRUD OPERATION USING JAVA -----

1 - Create Data
2 - Read Data
3 - Update Data
4 - Delete Data
5 - Exit
Select Option ---->>> 1

```

----- Create Data Carefully -----

Enter Roll number : 9  
Enter name : harry  
Enter marks : 300  
rows affected....

----- CRUD OPERATION USING JAVA -----

1 - Create Data  
2 - Read Data  
3 - Update Data  
4 - Delete Data  
5 - Exit

Select Option ---->> 2

----- Data contains-----

|                |                      |                 |
|----------------|----------------------|-----------------|
| Sudent ID : 1  | Name -->> Siddhi     | Marks -->> 990  |
| Sudent ID : 2  | Name -->> Anushree   | Marks -->> 1300 |
| Sudent ID : 3  | Name -->> Dhanashree | Marks -->> 950  |
| Sudent ID : 4  | Name -->> jon        | Marks -->> 720  |
| Sudent ID : 5  | Name -->> shree      | Marks -->> 350  |
| Sudent ID : 6  | Name -->> shreeraj   | Marks -->> 150  |
| Sudent ID : 7  | Name -->> aany       | Marks -->> 300  |
| Sudent ID : 8  | Name -->> jon        | Marks -->> 250  |
| Sudent ID : 9  | Name -->> harry      | Marks -->> 300  |
| Sudent ID : 10 | Name -->> bob        | Marks -->> 200  |

----- CRUD OPERATION USING JAVA -----