

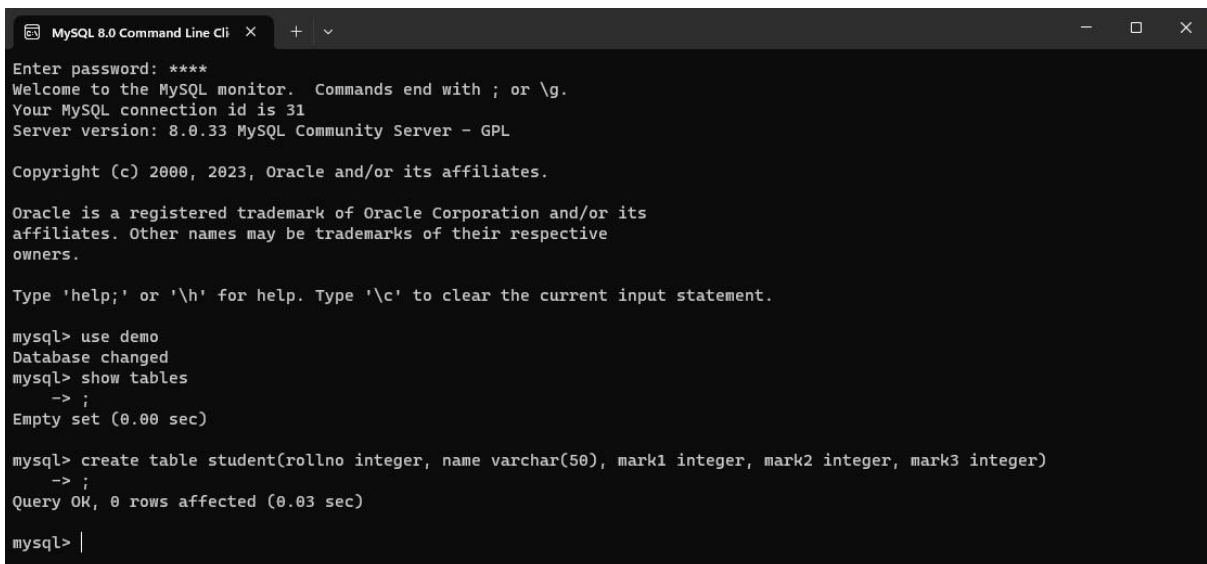
# ASSIGNMENT – 3

## MODERN APPLICATION DEVELOPMENT USING SPRINGBOOT

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### IMPLEMENTING JDBC USING JAVA

Creating the Database demo and the table student in the Command Line Interface (CLI):



```
MySQL 8.0 Command Line Cli x + v
Enter password: ****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 31
Server version: 8.0.33 MySQL Community Server - GPL

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> use demo
Database changed
mysql> show tables
+----+
Empty set (0.00 sec)

mysql> create table student(rollno integer, name varchar(50), mark1 integer, mark2 integer, mark3 integer)
+----+
Query OK, 0 rows affected (0.03 sec)

mysql> |
```

**JDBC Program to insert records using Statement and Display it using**

**Result Set Code:**

```
package studentjdbc;
import java.sql.*; public
class insertrecords
{
    public void inserting()
    {
        final String url = "jdbc:mysql://localhost:3307/demo";
        final String user = "root";
```

```

        final String pass = "root";
try
{
//      Class.forName("com.mysql.jdbc.Driver");
        Connection conn = DriverManager.getConnection(url,user,pass);
Statement st = conn.createStatement();      st.executeUpdate("INSERT
INTO student VALUES
(1,'SHRIKUMARAN',99,98,95);");
        st.executeUpdate("INSERT INTO student VALUES
(2,'VIGNESH',93,92,99);");
        st.executeUpdate("INSERT INTO student VALUES (3,'ROSHAN',
88,84,56);");      st.executeUpdate("INSERT INTO
student VALUES
(4,'DHANESHWAR',67,76,77);");
        st.executeUpdate("INSERT INTO student VALUES
(5,'NATARAJAN',88,84,88);");
        ResultSet rs = st.executeQuery("SELECT * FROM student");

        while(rs.next())
        {
            System.out.println(rs.getInt(1)+" "+rs.getString(2)+" "+rs.getInt(3)+"
"+rs.getInt(4)+" "+rs.getInt(5));
        }
st.close();
rs.close();
    }
    catch(Exception e)
    {
        System.out.println(e);
    }
}
}

```

## Output:

```

run:
1 SHRIKUMARAN 99 98 95
2 VIGNESH 93 92 99
3 ROSHAN 88 84 56
4 DHANESHWAR 67 76 77
5 NATARAJAN 88 84 88
BUILD SUCCESSFUL (total time: 0 seconds)

```

## JDBC Program to Delete rows that satisfies a particular condition:

### CODE:

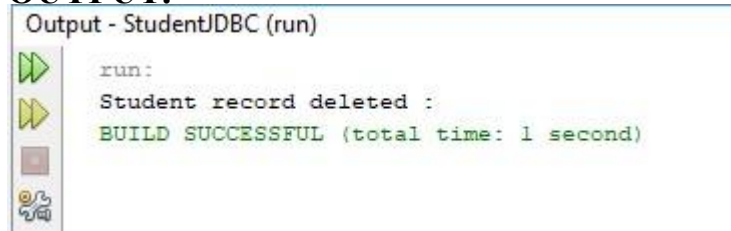
```
package studentjdbc; import
java.sql.*;
public class deleterecords {

    final String url = "jdbc:mysql://localhost:3307/demo";
    final String user = "root";
    final String pass = "root";
    public void delete()

{
    try
    {
        Connection conn = DriverManager.getConnection(url,user,pass);
        Statement st = conn.createStatement();
        int count = st.executeUpdate("delete from student where mark1>80 and
mark1<90");
        if(count>0)
            System.out.println("Student record deleted :");
        else
            System.out.println("NO records deleted : ");
    }
    catch(Exception e)
    {

```

### OUTPUT:



```
Output - StudentJDBC (run)
run:
Student record deleted :
BUILD SUCCESSFUL (total time: 1 second)
```

### Student table after deletion:

```
mysql> select * from student
-> ;
+-----+-----+-----+-----+
| rollno | name       | mark1 | mark2 | mark3 |
+-----+-----+-----+-----+
| 1 | SHRIKUMARAN | 99 | 98 | 95 |
| 2 | VIGNESH     | 93 | 92 | 99 |
| 4 | DHANESHWAR  | 67 | 76 | 77 |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql>
```

```

        System.out.println(e);
    }
}

```

## **UPDATING THE TABLE BASED ON A CONDITION:**

### **Code:**

```

public void update()

{
    try
    {
        Connection conn = DriverManager.getConnection(url,user,pass);
        Statement st = conn.createStatement();
        int res = st.executeUpdate("UPDATE student set mark1=95 where rollno=2");
        if(res>0)
            System.out.println("Updated Successfully");
        else
            System.out.println("No Rows affected : ");

    }
    catch(Exception e)
    {
        System.out.println(e);
    }
}

```

### **Output:**

```

run:
Updated Successfully
BUILD SUCCESSFUL (total time: 0 seconds)

```

### **Student Table after updating:**

```
mysql> select * from student
-> ;
```

rollno	name	mark1	mark2	mark3
1	SHRIKUMARAN	99	98	95
2	VIGNESH	95	92	99
4	DHANESHWAR	67	76	77

```
3 rows in set (0.00 sec)

mysql> |
```

### INSERTING USING PREPARED STATEMENT:

#### Code:

```
public void insPrep() {
    try {
        Connection conn = DriverManager.getConnection(url, user, pass);
        PreparedStatement stmt = conn.prepareStatement("insert into student
values(?,?,?,?)");
        stmt.setInt(1, 5); //1 specifies the first parameter in the query
        stmt.setString(2, "Gokul");          stmt.setInt(3, 88);
        stmt.setInt(4, 99);          stmt.setInt(5, 77);

        int i = stmt.executeUpdate();
        System.out.println(i + " records inserted");

        conn.close();    }
    catch (Exception e) {
        System.out.println(e);
    }
}
```

#### Output:

```
run:
1 records inserted
BUILD SUCCESSFUL (total time: 0 seconds)
```

#### Student Table after insertion:

```
mysql> select * from student;
```

rollno	name	mark1	mark2	mark3
1	SHRIKUMARAN	99	98	95
2	VIGNESH	95	92	99
4	DHANESHWAR	67	76	77
5	Gokul	88	99	77

```
4 rows in set (0.00 sec)
```

```
mysql> |
```