ASSIGNMENT – 3

Creating the Database that we need to connect to Java JDBC:


```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\bodar> mysql -u root -p
Enter password: ************
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 16
Server version: 8.0.33 MySQL Community Server - GPL

Copyright (c) 2000, 2023, Oracle and/or its affiliates.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

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

mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| siddudb            |
| sys                |
+--------------------+
5 rows in set (0.00 sec)
```

```
mysql> create database DB_20MIS7068
    -> ;
Query OK, 1 row affected (0.01 sec)

mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| db_2███████        |
| information_schema |
| mysql              |
| performance_schema |
| siddudb            |
| sys                |
+--------------------+
6 rows in set (0.00 sec)

mysql> use db_2█████
Database changed
mysql> create table EngineeringStudents(
    -> student_ID INT NOT NULL,
    -> Department VARCHAR(25),
    -> First_Name VARCHAR(25),
    -> Last_Name VARCHAR(25),
    -> PassOutYear INT NOT NULL,
    -> University_Rank INT NOT NULL,
    -> PRIMARY KEY(student_ID)
    -> );
Query OK, 0 rows affected (0.02 sec)
```

Inserting values into the Database db_20mis7

```
mysql> INSERT INTO EngineeringStudents VALUES (7068,'MTSE','Rangasai','Siddartha',2025,55);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO EngineeringStudents VALUES (7025,'MTSE','Pokala','Rohit',2025,54);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO EngineeringStudents VALUES (7016,'CSE','Vivek','Vardhan',2025,56);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO EngineeringStudents VALUES (7030,'ECE','Tharun','Goud',2024,44);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO EngineeringStudents VALUES (7040,'ECE','Yogi','Reddy',2024,44);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO EngineeringStudents VALUES (7039,'CSE','Veerndra','bee',2024,45);
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO EngineeringStudents VALUES (7005,'MTSE','Bansi','Noel',2025,99);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO EngineeringStudents VALUES (7026,'CSE','Pallavi','Iyer',2025,26);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO EngineeringStudents VALUES (7062,'MTSE','Aparna supriya','Suresh',2025,62);
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO EngineeringStudents VALUES (7003,'ECE','Pooja','P',2024,03);
Query OK, 1 row affected (0.03 sec)
```

Visualizing the Database db_2


```
Windows PowerShell        ×    +  ∨                                                               —   □   ×

mysql> INSERT INTO EngineeringStudents VALUES (7003,'ECE','Pooja','P',2024,03);
Query OK, 1 row affected (0.03 sec)

mysql> select * from EngineeringStudents;
+------------+------------+----------------+-----------+-------------+-----------------+
| student_ID | Department | First_Name     | Last_Name | PassOutYear | University_Rank |
+------------+------------+----------------+-----------+-------------+-----------------+
|       7003 | ECE        | Pooja          | P         |        2024 |               3 |
|       7005 | MTSE       | Bansi          | Noel      |        2025 |              99 |
|       7016 | CSE        | Vivek          | Vardhan   |        2025 |              56 |
|       7025 | MTSE       | Pokala         | Rohit     |        2025 |              54 |
|       7026 | CSE        | Pallavi        | Iyer      |        2025 |              26 |
|       7030 | ECE        | Tharun         | Goud      |        2024 |              44 |
|       7039 | CSE        | Veerndra       | bee       |        2024 |              45 |
|       7040 | ECE        | Yogi           | Reddy     |        2024 |              44 |
|       7062 | MTSE       | Aparna supriya | Suresh    |        2025 |              62 |
|       7068 | MTSE       | Rangasai       | Siddartha |        2025 |              55 |
+------------+------------+----------------+-----------+-------------+-----------------+
10 rows in set (0.00 sec)

mysql> select student_ID,Department,First_Name,Last_Name,PassOutYear from EngineeringStudents where Student_ID = 7068;
+------------+------------+------------+-----------+-------------+
| student_ID | Department | First_Name | Last_Name | PassOutYear |
+------------+------------+------------+-----------+-------------+
|       7068 | MTSE       | Rangasai   | Siddartha |        2025 |
+------------+------------+------------+-----------+-------------+
1 row in set (0.00 sec)

mysql>
```

WorkBench Output:

Connecting the Database with Java JDBC:

We need to perform try catch method and the modules need to import are:
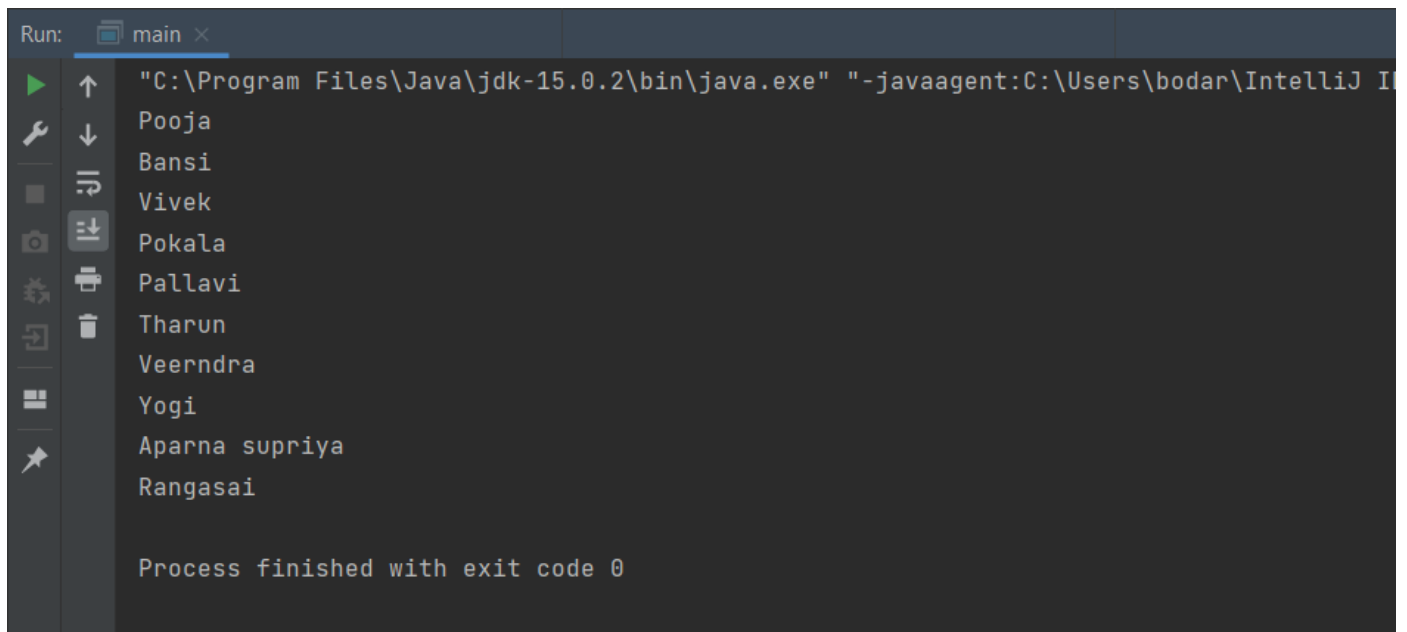
- Connection
- DriverManager
- ResultSet
- Statement

```java
package com.Siddartha;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;

public class main {
    public static void main(String[] args) {
        try {
            Connection conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/db_20mis7068","root","Anuprasad_19");
            Statement statement = conn.createStatement();
            ResultSet resultSet = statement.executeQuery("select * from EngineeringStudents");
            while (resultSet.next()) {
                System.out.println(resultSet.getString("First_Name"));
            }
        }
        catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

Output that displays the First_Name column of the Database db_

```
Run:      main ×
    "C:\Program Files\Java\jdk-15.0.2\bin\java.exe" "-javaagent:C:\Users\bodar\IntelliJ I
    Pooja
    Bansi
    Vivek
    Pokala
    Pallavi
    Tharun
    Veerndra
    Yogi
    Aparna supriya
    Rangasai

    Process finished with exit code 0
```

```java
package com.Siddartha;

import java.sql.Connection;
import java.sql.DriverManager;
```

```java
import java.sql.ResultSet;
import java.sql.Statement;

public class main {
    public static void main(String[] args) {
        try {
            Connection conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/db_20mis7068","root","Anuprasad_19");
            Statement statement = conn.createStatement();
            ResultSet resultSet = statement.executeQuery("select * from EngineeringStudents");
            while (resultSet.next()) {
                System.out.println(resultSet.getString("First_Name")+ " " +resultSet.getString("Last_Name"));
            }
        }
        catch (Exception e) {
            e.printStackTrace();
        }
    }
}
```

Output that displays the First_Name + Last_Name columns of the Database db_2:

```
Run:
    "C:\Program Files\Java\jdk-15.0.2\bin\java.exe" "-javaagent:C:\Users\bodar\IntelliJ IDEA Commun
    Pooja P
    Bansi Noel
    Vivek Vardhan
    Pokala Rohit
    Pallavi Iyer
    Tharun Goud
    Veerndra bee
    Yogi Reddy
    Aparna supriya Suresh
    Rangasai Siddartha

    Process finished with exit code 0
```