SMARTBRIDGE EXTERNSHIP

Modern Application Development
Java Spring Boot

Assignment 3
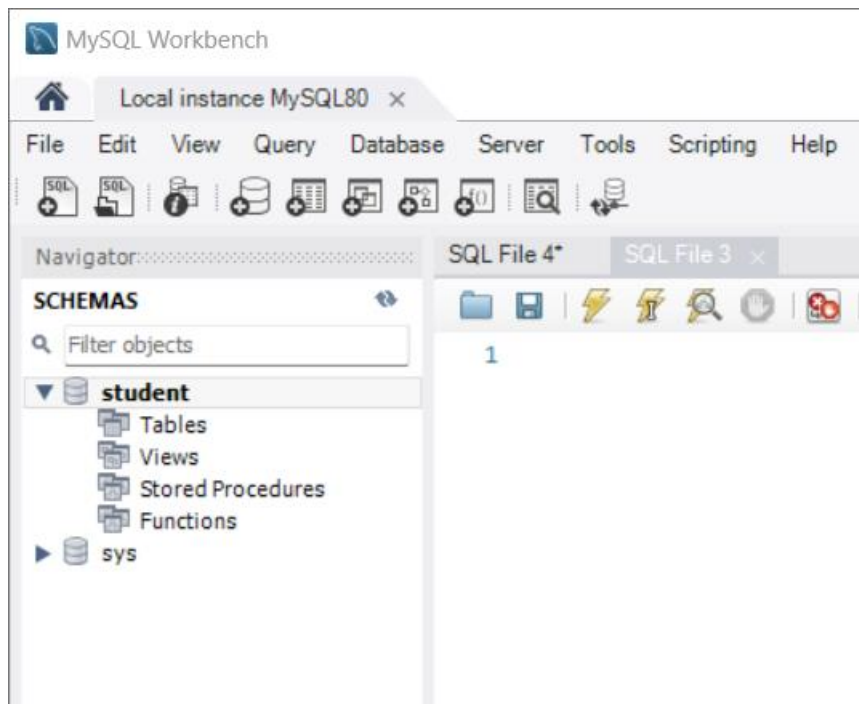
JDBC CONNECTION

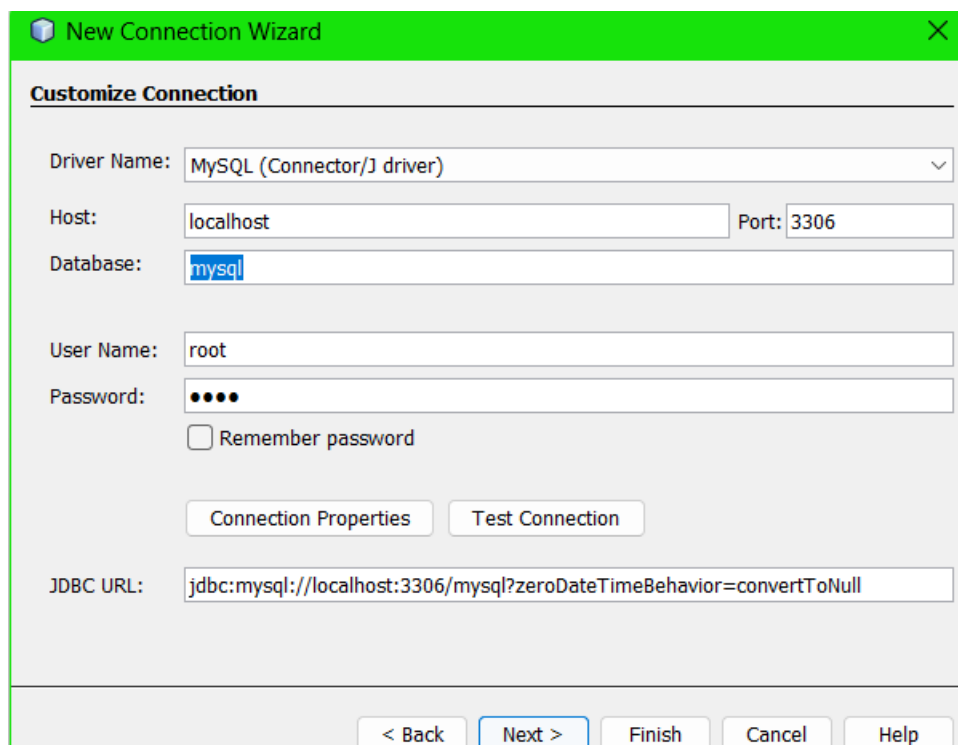**NAME:** ARAVINDKRISHNA R

REG. No.: 20BCE0074

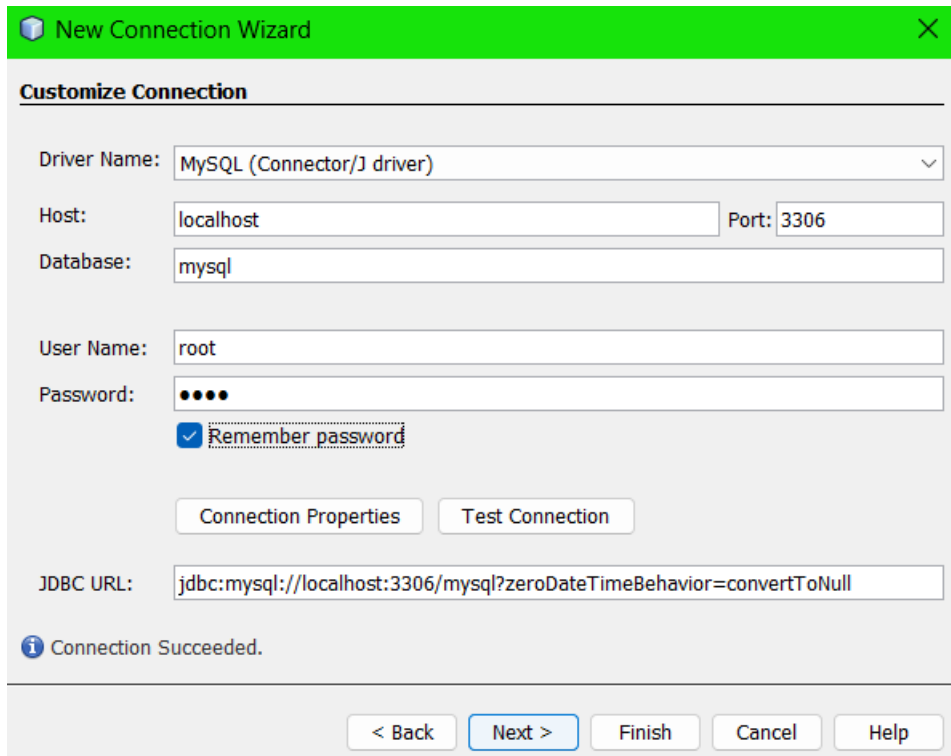**DATE:** 04-06-2023

Implement java assignment for java JDBC using java

Creating database in sql

Creating jdbc connection,

Connection status

New Connection Wizard

Customize Connection

Driver Name: MySQL (Connector/J driver)

Host: localhost   Port: 3306
Database: mysql

User Name: root
Password: ••••
☑ Remember password
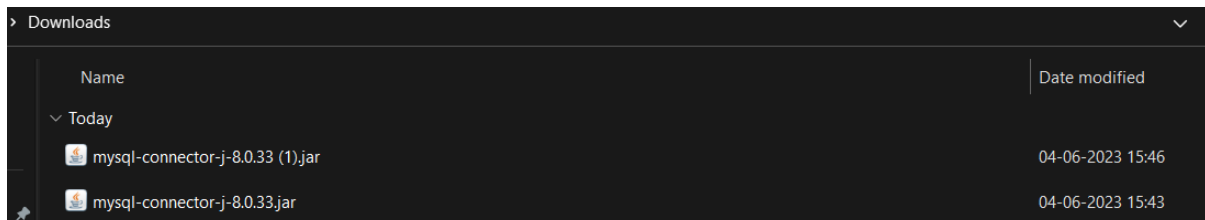
Connection Properties   Test Connection

JDBC URL: jdbc:mysql://localhost:3306/mysql?zeroDateTimeBehavior=convertToNull

ⓘ Connection Succeeded.

< Back   Next >   Finish   Cancel   Help

Downloading the jar file,

> Downloads

Name	Date modified
∨ Today	
☕ mysql-connector-j-8.0.33 (1).jar	04-06-2023 15:46
☕ mysql-connector-j-8.0.33.jar	04-06-2023 15:43

Adding the jar file in library,

☕ Javaconnect
  📁 Source Packages
    📒 javaconnect
      📄 Javaconnect.java
  📁 Libraries
    📦 mysql-connector-j-8.0.33.jar
    🖥 JDK 1.8 (Default)
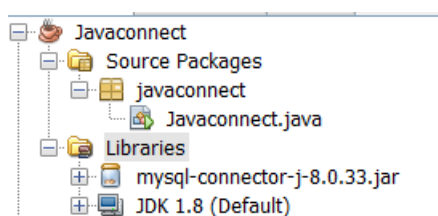
Creating a table,

Code

```java
package javaconnect;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.Statement;
public class Javaconnect {
    public static void main(String[] args) {
        try{
         Class.forName("com.mysql.jdbc.Driver");
            String url = "jdbc:mysql://localhost:3306/student";
            String username = "root";
            String password = "root";
            Connection connection = DriverManager.getConnection(url, username, password);
            Statement statement = connection.createStatement();
            String createTableQuery = "CREATE TABLE example_table (" +
                "id INT PRIMARY KEY," +
                "name VARCHAR(50)," +
                "age INT" +
                ")";
            statement.executeUpdate(createTableQuery);
            System.out.println("Table created successfully.");
            statement.close();
            connection.close();
        } catch (Exception e) {
            e.printStackTrace();
        }
    }

}
```

Ouput

run:
Loading class 'com.mysql.jdbc.Driver'. This is deprecated. The new driver class is 'com.mysql.cj.jdbc.Driver'. The driver is automatically registered via the SPI and manual loading of
the driver class is generally unnecessary.
Table created successfully.
BUILD SUCCESSFUL (total time: 1 second)

Code to insert

```java
package javaconnect;

  public static void main(String[] args) {


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


        String url = "jdbc:mysql://localhost:3306/student";

        String username = "root";

        String password = "root";


        Connection connection = DriverManager.getConnection(url, username, password);


        Statement statement = connection.createStatement();


          String insertQuery = "INSERT INTO example_table (id, name, age) VALUES " +

              "(1, 'Aravind', 25)," +

              "(2, 'Krishna', 30)," +

              "(3, 'Ram', 35)";


        int rowsAffected = statement.executeUpdate(insertQuery);


        System.out.println(rowsAffected + " row(s) inserted successfully.");


        // Step 5: Close the statement and connection

        statement.close();

        connection.close();

      } catch (Exception e) {
```

```
            e.printStackTrace();

      }

   }


}
```

```java
            String insertQuery = "INSERT INTO example_table (id, name, age) VALUES " +
                    "(1, 'Aravind', 25)," +
                    "(2, 'Krishna', 30)," +
                    "(3, 'Ram', 35)";

        int rowsAffected = statement.executeUpdate(insertQuery);

        System.out.println(rowsAffected + " row(s) inserted successfully.");
```
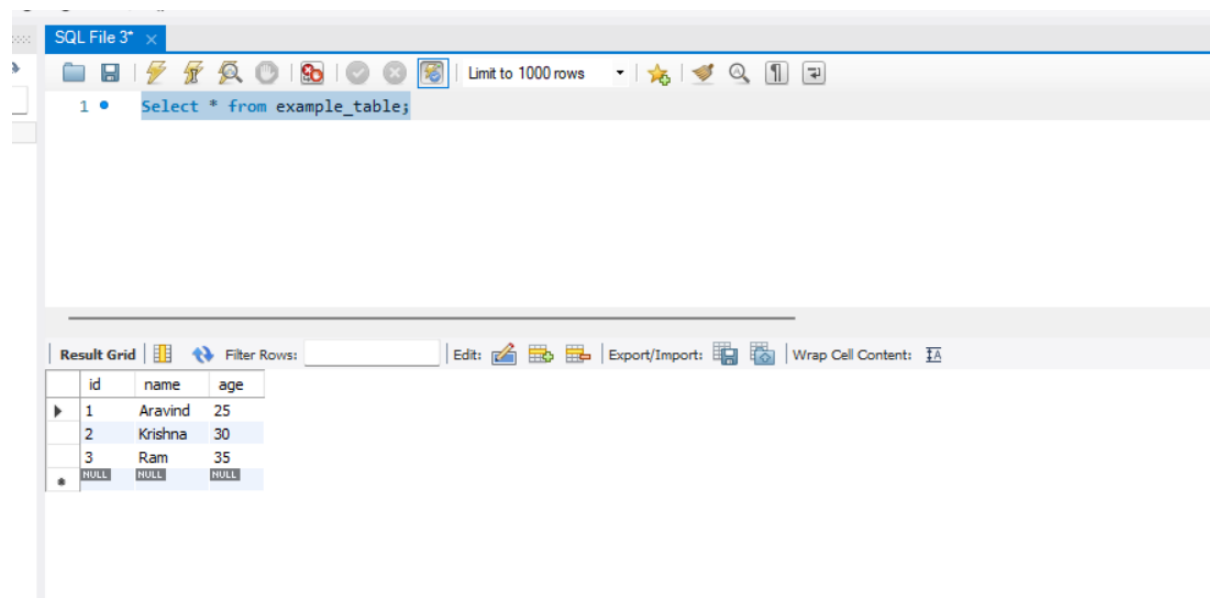
Output

```
run:
Loading class `com.mysql.jdbc.Driver'. This is deprecated. The
 the driver class is generally unnecessary.
3 row(s) inserted successfully.
BUILD SUCCESSFUL (total time: 1 second)
```

Output in sql

Code to print resuls from select statement,

```java
package javaconnect;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;
public class Javaconnect {
    public static void main(String[] args) {
        try{
         Class.forName("com.mysql.jdbc.Driver");
            String url = "jdbc:mysql://localhost:3306/student";
            String username = "root";
            String password = "root";


            Connection connection = DriverManager.getConnection(url, username, password);
             Statement statement = connection.createStatement();


            String selectQuery = "SELECT * FROM example_table";
            ResultSet resultSet = statement.executeQuery(selectQuery);


            while (resultSet.next()) {
                int id = resultSet.getInt("id");
                String name = resultSet.getString("name");
                int age = resultSet.getInt("age");


                System.out.println("ID: " + id + ", Name: " + name + ", Age: " + age);
            }
            statement.close();
            connection.close();
        } catch (Exception e) {
```

```java
            e.printStackTrace();

        }

    }


}
```

Output

```
Loading class `com.mysql.jdbc.Driver'. This i
gistered via the SPI and manual loading of th
ID: 1, Name: Aravind, Age: 25
ID: 2, Name: Krishna, Age: 30
ID: 3, Name: Ram, Age: 35
BUILD SUCCESSFUL (total time: 1 second)
```

Code for inserting using prepared statements

```java
package javaconnect;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.Statement;

public class Javaconnect {

    public static void main(String[] args) {

        try{

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


            String url = "jdbc:mysql://localhost:3306/student";

            String username = "root";

            String password = "root";


            Connection connection = DriverManager.getConnection(url, username, password);
```

```java
        String insertQuery = "INSERT INTO example_table (id, name, age) VALUES (?, ?, ?)";

        PreparedStatement preparedStatement = connection.prepareStatement(insertQuery);

        preparedStatement.setInt(1, 4);

        preparedStatement.setString(2, "Alice Johnson");

        preparedStatement.setInt(3, 28);

        int rowsAffected = preparedStatement.executeUpdate();


        System.out.println(rowsAffected + " row(s) inserted successfully.");

        preparedStatement.close();

        connection.close();


    } catch (Exception e) {

        e.printStackTrace();

    }

  }


}
```

```java
    String insertQuery = "INSERT INTO example_table (id, name, age) VALUES (?, ?, ?)";
    PreparedStatement preparedStatement = connection.prepareStatement(insertQuery);


    preparedStatement.setInt(1, 4);
    preparedStatement.setString(2, "Alice Johnson");
    preparedStatement.setInt(3, 28);


    int rowsAffected = preparedStatement.executeUpdate();

    System.out.println(rowsAffected + " row(s) inserted successfully.");


    preparedStatement.close();
    connection.close();
```

Output

```
run:
Loading class `com.mysql.jdbc.Driver'. This is
gistered via the SPI and manual loading of the
1 row(s) inserted successfully.
BUILD SUCCESSFUL (total time: 1 second)
```

Output in sql