

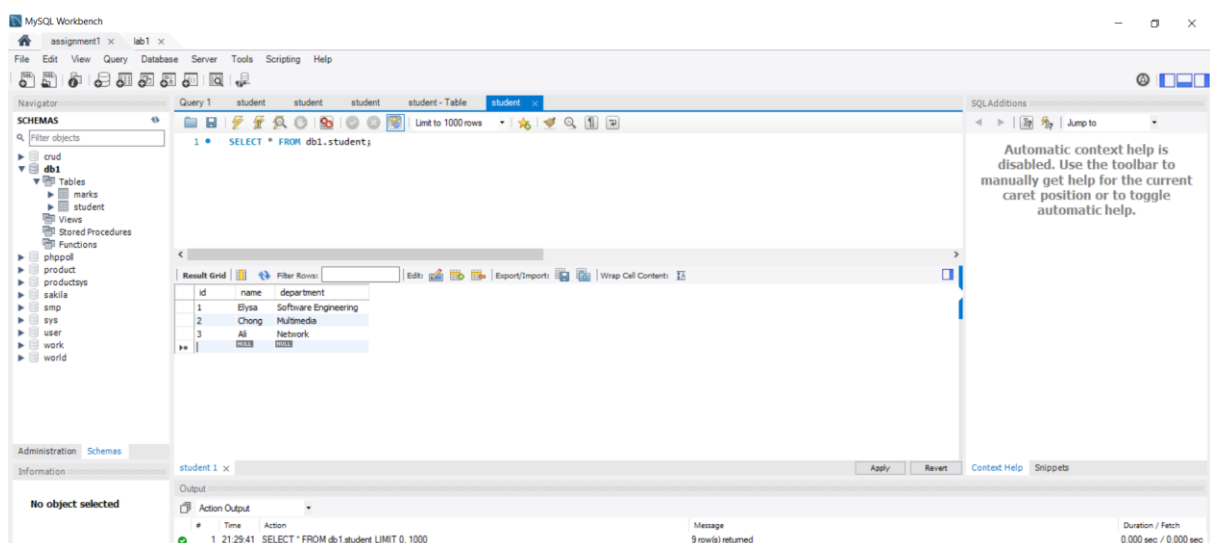
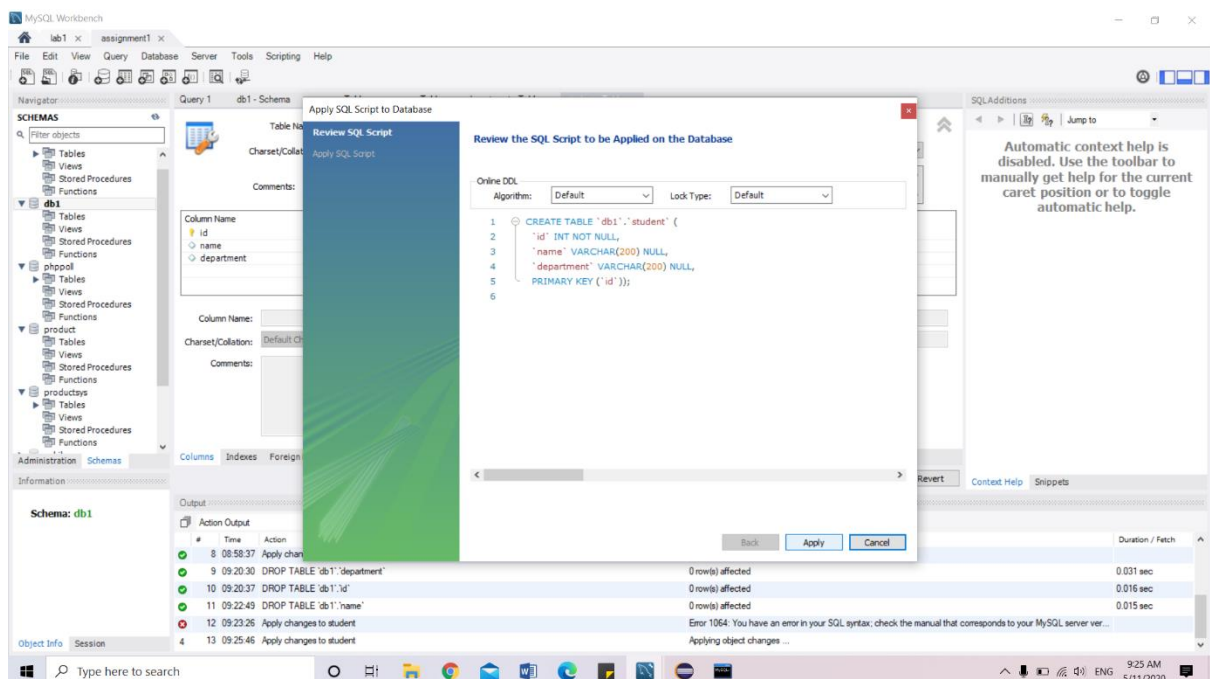
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JDBC Practical

JDBC (Java Database Connectivity) is a Java API that manages the database connection, issues queries and commands, and handles the result sets obtained from the database. The database used for this lab is MySQL.

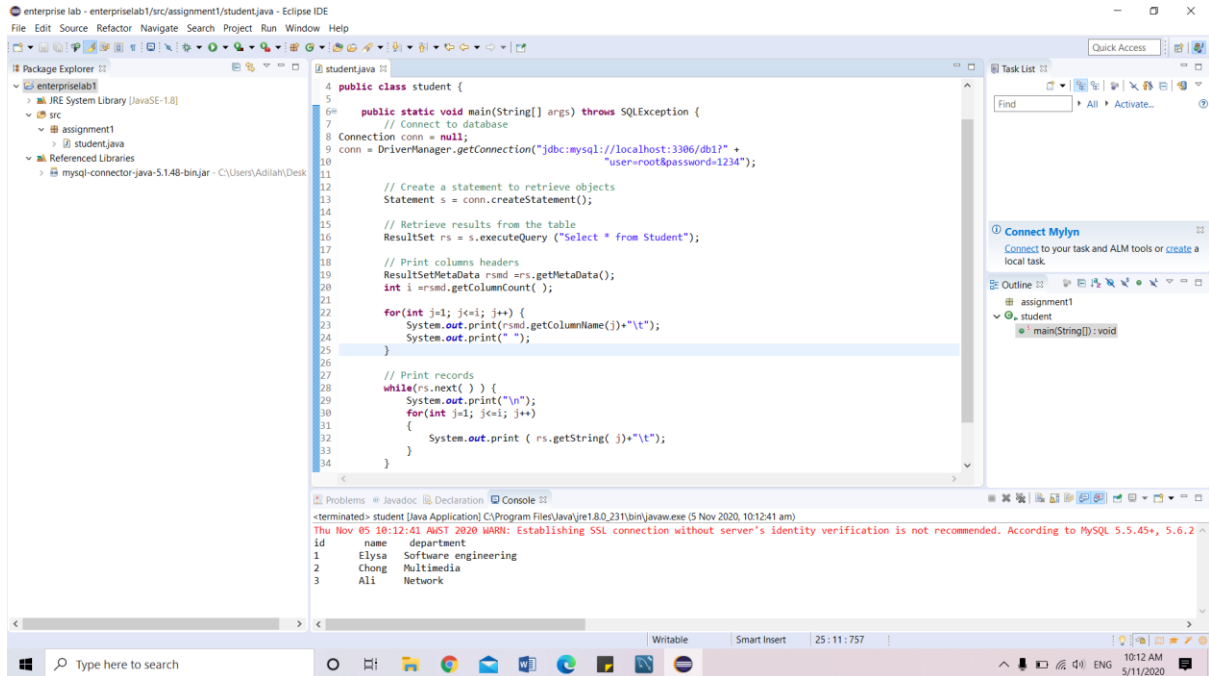
Input in MySQL Workbench

Student table is created under db1 database. The table student has student details such as their id, name and department.



Output

The student.java class have retrieved the student information (id, name and department) from database (mySQL) by connecting it using JDBC and the output after run is shown in the console as the figure below.



The screenshot displays the Eclipse IDE interface. The Package Explorer on the left shows the project structure: enterprise1 > src > assignment1 > student.java. The main editor window shows the code for student.java, which connects to a MySQL database and retrieves student data. The Console window at the bottom shows the output of the program, including a warning about SSL connection and a table of student data.

```
4 public class student {
5
6     public static void main(String[] args) throws SQLException {
7         // Connect to database
8         Connection conn = null;
9         conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/db1?" +
10                                         "user=root&password=1234");
11
12         // Create a statement to retrieve objects
13         Statement s = conn.createStatement();
14
15         // Retrieve results from the table
16         ResultSet rs = s.executeQuery ("Select * from Student");
17
18         // Print columns headers
19         ResultSetMetaData rsmd =rs.getMetaData();
20         int i =rsmd.getColumnCount( );
21
22         for(int j=1; j<=i; j++) {
23             System.out.print(rsmd.getColumnName(j)+"\t");
24             System.out.print(" ");
25         }
26
27         // Print records
28         while(rs.next( ) ) {
29             System.out.print("\n");
30             for(int j=1; j<=i; j++)
31             {
32                 System.out.print ( rs.getString( j)+"\t");
33             }
34         }
35     }
36 }
```

Console Output:

```
<terminated> student [Java Application] C:\Program Files\Java\jre1.8.0_231\bin\javaw.exe (5 Nov 2020, 10:12:41 am)
Thu Nov 05 10:12:41 AMST 2020 WARN: Establishing SSL connection without server's identity verification is not recommended. According to MySQL 5.5.45+, 5.6.2
id      name      department
1      Elysa    Software engineering
2      Chong    Multimedia
3      Ali      Network
```