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Create a java project and add class.

```java
package JDBC;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;

//import java.sql.Connection;

public class JdbcExample
{

    public static void main(String[] args) throws ClassNotFoundException, SQLException {
        //step 1 register the driver
        Class.forName("com.mysql.cj.jdbc.Driver");

        //step 2 Establish the connection

        Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/mydb","root","root");

        System.out.println("Connection created");
    }
}
```
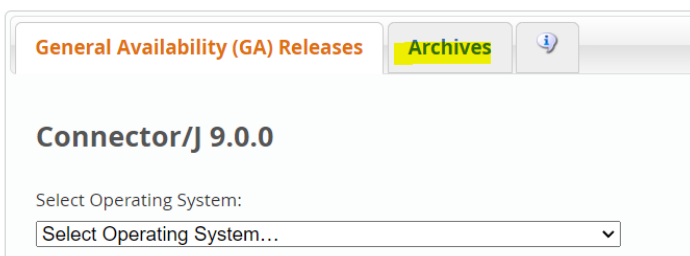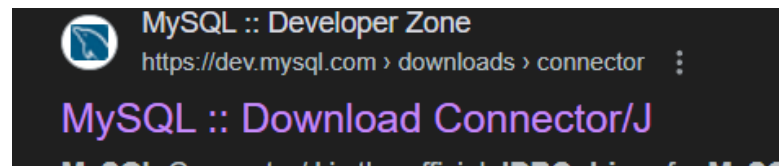
Run JavaApplication

```
<terminated> JdbcExample [Java Application] C:\Users\wasim\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_22.0.2...
Exception in thread "main" java.lang.ClassNotFoundException: com.mysql.cj.jdbc.Driver
        at java.base/jdk.internal.loader.BuiltinClassLoader.loadClass(BuiltinClassLoader.java:641)
        at java.base/jdk.internal.loader.ClassLoaders$AppClassLoader.loadClass(ClassLoaders.java:188)
        at java.base/java.lang.ClassLoader.loadClass(ClassLoader.java:525)
        at java.base/java.lang.Class.forName0(Native Method)
        at java.base/java.lang.Class.forName(Class.java:413)
        at java.base/java.lang.Class.forName(Class.java:404)
        at MyProject/JDBC.JdbcExample.main(JdbcExample.java:15)
```

Copy com.mysql.cj.jdbc.Driver

Goto google and pest com.mysql.cj.jdbc.Driver download

MySQL :: Developer Zone
https://dev.mysql.com › downloads › connector

MySQL :: Download Connector/J

MySQL Connector/J is the official JDBC driver for MySQL

General Availability (GA) Releases   Archives

Connector/J 9.0.0

Select Operating System:

Select Operating System…

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Product Version:	8.4.0
Operating System:	Platform Independent

Platform Independent (Architecture Independent), Compressed TAR Archive	Mar 12, 2024	4.1M	Download
(mysql-connector-j-8.4.0.tar.gz)		MD5: 33a74d1a803b504a1141a327bf6ff7c3	Signature
Platform Independent (Architecture Independent), ZIP Archive	Mar 12, 2024	4.9M	Download
(mysql-connector-j-8.4.0.zip)		MD5: 5d426b639f7b4c314492edff07c615dc	Signature

Right click
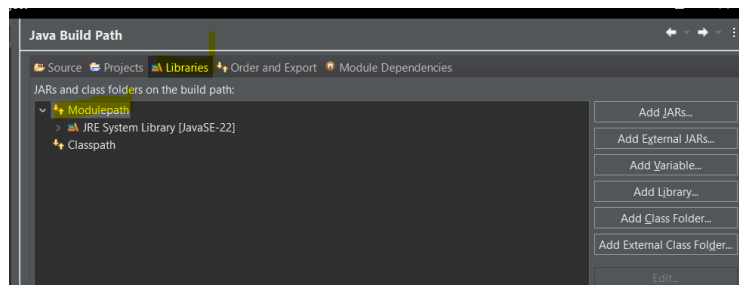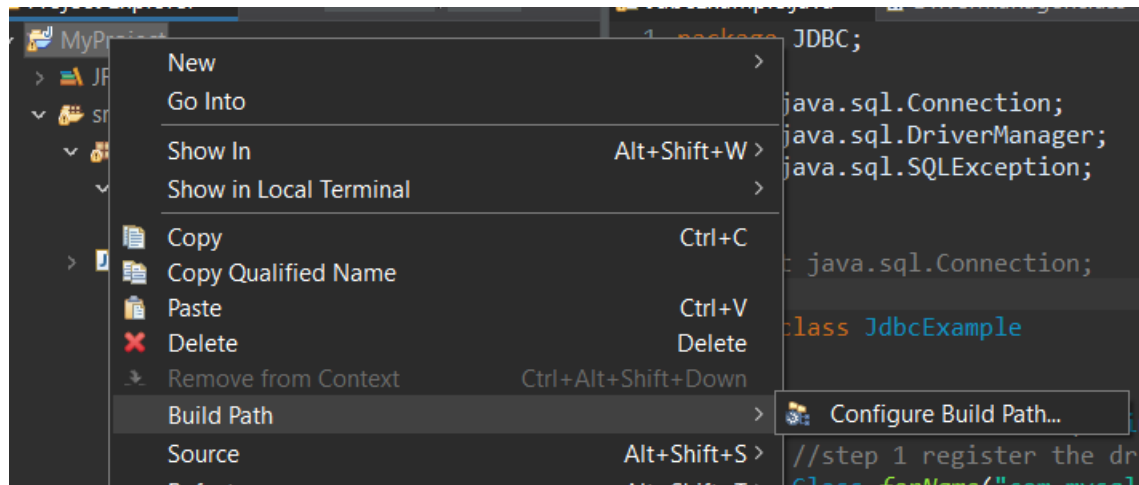
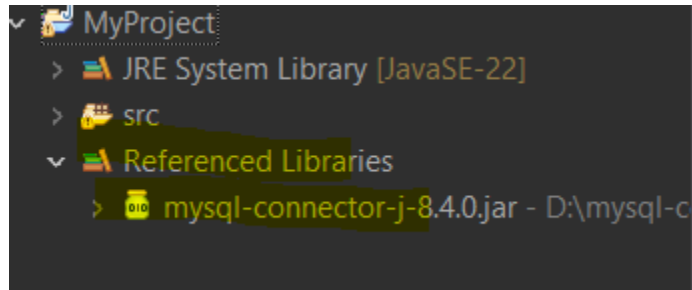Libraries/Moculepath/add External JARs/select.../App;y/app;y close

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```
MyProject
  > JRE System Library [JavaSE-22]
  > src
  v Referenced Libraries
      > mysql-connector-j-8.4.0.jar - D:\mysql-c
```
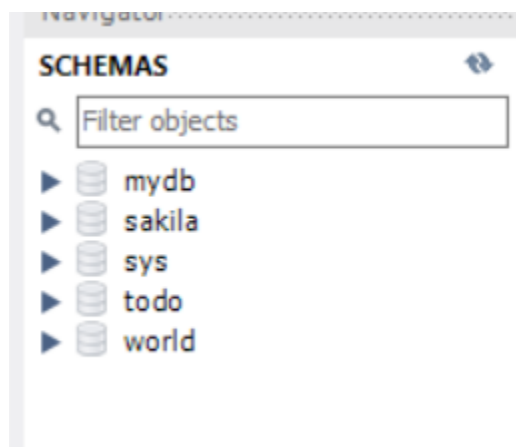
```
 1  package JDBC;
 2
 3  import java.sql.Connection;
 6
 7
 8  //import java.sql.Connection;
 9
10  public class JdbcConnection
11  {
12
13      public static void main(String[] args) throws ClassNotFoundException, SQLException {
14          //step 1 register the driver
15          Class.forName("com.mysql.cj.jdbc.Driver");
16
17          //step 2 Establish the connection
18
19          Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/mydb","root","root");
20
21          System.out.println("Connection created");
22      }
23  }
```

Problems @ Javadoc Declaration Console ✕

<terminated> JdbcConnection [Java Application] C:\Users\wasim\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_22.0.2.v20240802-162
Connection created

```
Navigator
SCHEMAS                          ↻
Q  Filter objects
  ▶  mydb
  ▶  sakila
  ▶  sys
  ▶  todo
  ▶  world
```

total db present

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```java
package JDBC;

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

public class CreateDB {

    public static void main(String[] args) {
        Connection con = null;
        Statement stmt = null;
        try {
            // Establishing the connection
            con = DriverManager.getConnection("jdbc:mysql://localhost:3306/", "root", "root");

            // Creating a Statement object
            stmt = con.createStatement();

            // SQL query to create a database
            String sql = "CREATE DATABASE IF NOT EXISTS MyDatabase";
            stmt.executeUpdate(sql);

            System.out.println("Database created successfully...");
        } catch (SQLException e) {
            e.printStackTrace();
        } finally {
            // Closing resources
            try {
                if (stmt != null) stmt.close();
                if (con != null) con.close();
            } catch (SQLException e) {
                e.printStackTrace();
            }
        }
    }
}
```

Filter objects

Problems @ Javadoc Declaration Console ✕

<terminated> CreateDB [Java Application] C:\Users\wasim

Database created successfully...

▶ mydatabase
▶ mydb
▶ sakila
▶ sys
▶ todo
▶ world

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```java
    public static void main(String[] args) throws SQLException
    {
        // Establishing the connection
        Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/MyDatabase", "root", "root");

        // Creating a Statement object
        Statement stmt = con.createStatement();

        // SQL query to create a table
        String sql = "CREATE TABLE Students ("
                + "id INT PRIMARY KEY AUTO_INCREMENT, "
                + "name VARCHAR(50), "
                + "age INT, "
                + "marks INT"
                + ")";

        // Executing the query
        stmt.executeUpdate(sql);

        System.out.println("Table created successfully...");

        con.close();

    }
```

Problems @ Javadoc Declaration Console ×
terminated> CreateTable [Java Application] C:\Users\wasim\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_22.0.2.v20240802-1626\jre\bin\javaw.
ble created successfully...

Creating table

```java
8  public class InsertData {
9
10     public static void main(String[] args) throws SQLException {
11
12         // Establishing the connection
13         Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/MyDatabase", "root", "root");
14
15         // Creating a Statement object
16         Statement stmt = con.createStatement();
17
18         // SQL query to insert data into the Students table
19         String sql = "INSERT INTO Students (name, age, marks) "
20                     + "VALUES ('John Doe', 20, 85),"
21                     + "('Jane Smith', 22, 90),"
22                     + "('Mike Johnson', 21, 78)";
23
24         // Executing the query
25         int rowsInserted = stmt.executeUpdate(sql);
26
27         System.out.println(rowsInserted + " rows inserted successfully.");
28
29         con.close();
30     }
31
```

Problems @ Javadoc Declaration Console ×
<terminated> InsertData [Java Application] C:\Users\wasim\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_22.0.2.v20240802-1626\jre\
3 rows inserted successfully.

Insert data in a table

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```java
11    public static void main(String[] args) throws SQLException {
12        Connection con = null;
13        Statement stmt = null;
14        ResultSet rs = null;
15
16            // Establishing the connection
17            con = DriverManager.getConnection("jdbc:mysql://localhost:3306/MyDatabase", "root", "root");
18
19            // Creating a Statement object
20            stmt = con.createStatement();
21
22            // SQL query to retrieve data from the Students table
23            String sql = "SELECT * FROM Students";
24
25            // Executing the query and getting the result set
26            rs = stmt.executeQuery(sql);
27
28            // Displaying the data
29            System.out.println("ID | Name        | Age | Marks");
30            System.out.println("---------------------------------");
31
32            while (rs.next()) {
33                int id = rs.getInt("id");
34                String name = rs.getString("name");
35                int age = rs.getInt("age");
36                int marks = rs.getInt("marks");
37
38                System.out.println(id + "  | " + name + " | " + age + "  | " + marks);
39
40                |
41            }
42        }
43 }
```

```
Problems  @ Javadoc  @ Declaration  ▣ Console ×
<terminated> DisplayData [Java Application] C:\Users\wasim\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_22.0.2.v20240802-162
ID | Name        | Age | Marks
---------------------------------
1  | John Doe    | 20  | 85
2  | Jane Smith  | 22  | 90
3  | Mike Johnson | 21 | 78
```

Show the result

```java
9  public class UpdateTheData {
10
11     public static void main(String[] args) throws SQLException {
12         Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/MyDatabase","root","root");
13
14         Statement stm=con.createStatement();
15
16         String sql = "UPDATE Students SET marks = 95 WHERE id = 1";
17
18         int update=stm.executeUpdate(sql);
19
20
21         con.close();
```

```
Problems  @ Javadoc  @ Declaration  ▣ Console ×
<terminated> UpdateTheData [Java Application] C:\Users\wasim\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_22.0.2.v20240802-16
1 John Doe 20 95
2 Jane Smith 22 90
3 Mike Johnson 21 78
```

Update data

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```
10    public static void main(String[] args) throws SQLException {
11
12        Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/MyDatabase","root","root");
13
14        Statement stmt=con.createStatement();
15
16         // SQL query to delete a row from the Students table
17        String sql = "DELETE FROM Students WHERE id = 9";
18
19        // Executing the query
20        int rowsAffected = stmt.executeUpdate(sql);
21
22        if (rowsAffected > 0) {
23            System.out.println("Row deleted successfully.");
24        } else {
25            System.out.println("No row found with the given id.");
26        }
27
28        con.close();
```

Problems @ Javadoc Declaration Console ×

<terminated> DeleteData [Java Application] C:\Users\wasim\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_22.0.2.v20240802-1626\jre\
Row deleted successfully.

Delete data from table