LAB – 8

Create a Java program using JDBC to insert a new product into the Products table and then implement a trigger in the database that updates the LastModified timestamp in the Product_Metadata table whenever a product is added or modified.

Sol:

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

java.sql.DriverManager; import

java.sql.PreparedStatement; import

java.sql.SQLException; public class

ProductInsertion

{ private static final String URL = "jdbc:mysql://localhost:3306/your_database";

    private static final String USER = "your_username";


    private static final String PASSWORD = "your_password";  private static

    Connection connection; private static PreparedStatement preparedStatement;

    public static void main(String[] args) { String productName = "New

    Product"; double price = 10.99; int quantity = 100; try { connection =

        DriverManager.getConnection(URL, USER, PASSWORD);


        String sql = "INSERT INTO Products (ProductName, Price, Quantity) VALUES

(?, ?, ?)";

        preparedStatement = connection.prepareStatement(sql);

        preparedStatement.setString(1, productName);

        preparedStatement.setDouble(2, price); preparedStatement.setInt(3,
```

```java
            quantity);  int rowsAffected


        preparedStatement.executeUpdate(); if


        (rowsAffected > 0) {

            System.out.println("Product inserted successfully.");

        }  else

        {

            System.out.println("Failed to insert product."); }

    }
    catch (SQLException e) {

        e.printStackTrace(); }


    finally {


    try {


            if (preparedStatement != null) {

                preparedStatement.close();

            }
            if (connection != null) {

                connection.close();

            } }   catch

        (SQLException e) {

            e.printStackTrace();

        }

    }

    }
```