

**1. Create a Java program using JDBC to insert a new product into the Products table.**

```
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, 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();
}
}
}
```