

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:

```
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(exception)
```

```
{
```

```
    e.printStackTrace();
```

```
}
```

```
}
```

```
}
```