Project Title – "Retail Management System"

Phase 5: Apex Programming (Developer)

Classes & Objects

Purpose of the Class
The OrderHelper class is designed to automatically manage customer interactions after billing.
It ensures consistency in retail sales records by resetting the ThankYou_Sent__c flag whenever a bill is generated.

Business Logic Implemented

- If Bill_Status__c = 'Generated', then ThankYou_Sent__c is set to False.

- This ensures that a Thank You email can be sent automatically once the order is confirmed.

- Keeps track of customer engagement status and avoids duplicate Thank You messages.

Anonymous Code Window – Example Run

- Insert a new Sales_Order__c record with Bill_Status__c = 'Generated'.

- Check if ThankYou_Sent__c becomes **False** automatically.

Output

- Debug logs confirm that the flag is correctly reset.

Trigger Design Pattern

Purpose of the Trigger Handler
The OrderTriggerHandler class contains logic for managing order-related fields before saving records in Salesforce.
It ensures every order follows business rules and maintains proper Thank You tracking.

Business Logic Implemented

- **Default Assignment**: If ThankYou_Sent__c is blank, it is automatically set to **False**.

- **Billing Check**: When Bill_Status__c = 'Generated', ThankYou_Sent__c is reset to False for email automation.
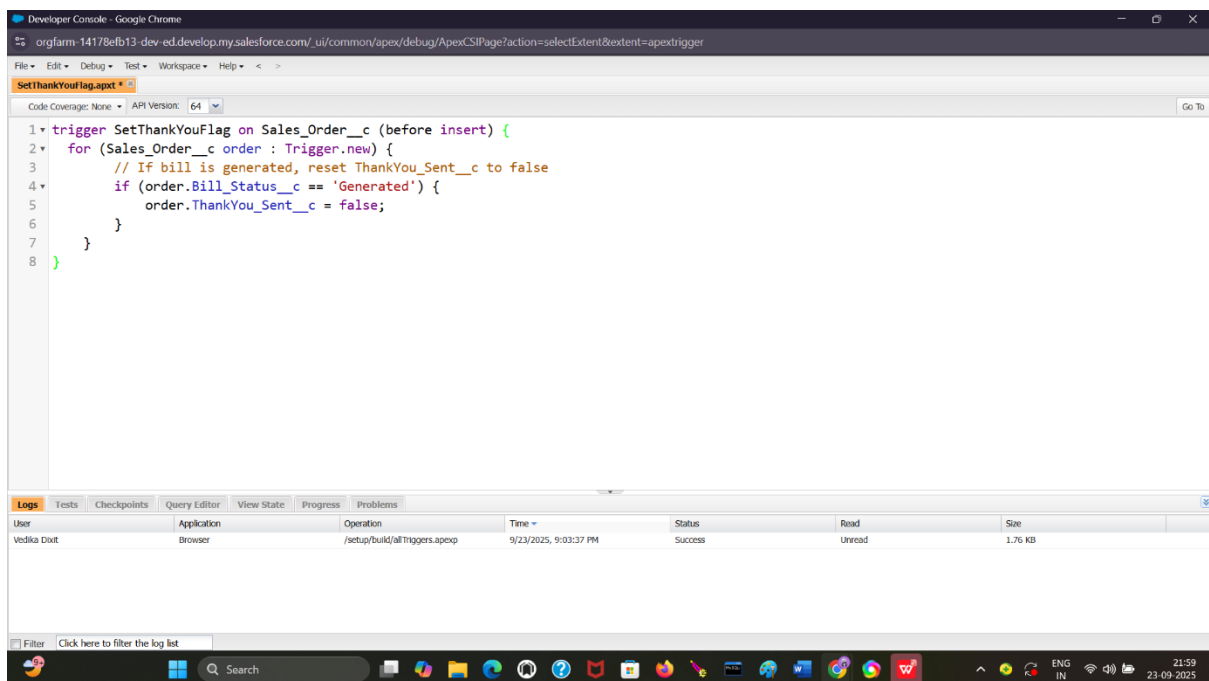
Anonymous Window Code – Example Run

- Create an order with status **Generated**.

- System.debug() shows that ThankYou_Sent__c = **False**.

Output

- The trigger enforces rules consistently across all new orders.

Apex Triggers (before/after insert/update/delete)

Output

- Works for bulk records.

- Prevents manual errors in customer communication workflows.

SOQL & SOSL

SOQL

Purpose

- To fetch all orders where Thank You emails are pending.

Query Example

```
List<Sales_Order__c> pendingOrders = [
    SELECT Id, Name, Bill_Status__c, ThankYou_Sent__c, Customer__c
    FROM Sales_Order__c
    WHERE ThankYou_Sent__c = false
];
```

Debugging / Verification

- System.debug() prints pending orders.
- Confirms automation is ready to send Thank You emails.