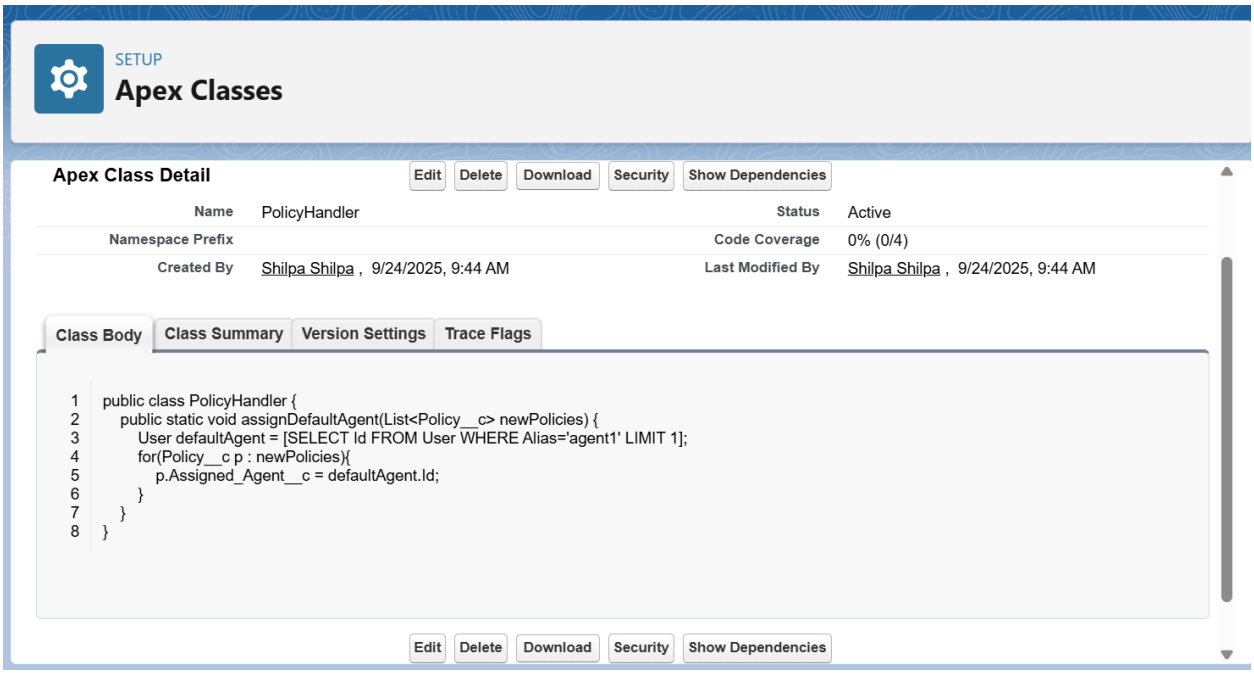
Phase 5: Apex Programming (Developer)

Objectives:

- Automate record processing
- Implement triggers for real-time operations
- Ensure data consistency and security

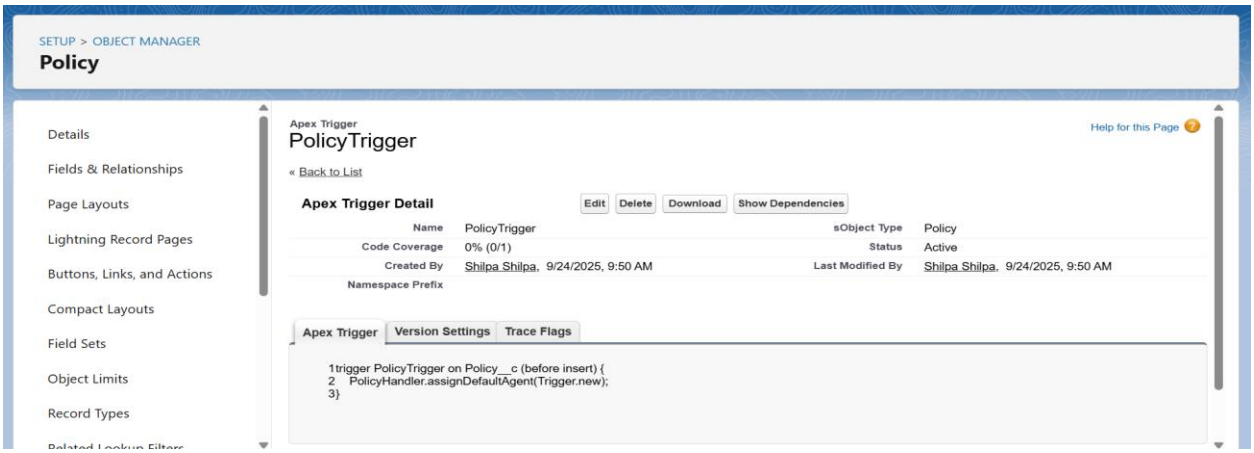
Apex Classes:

- Purpose: Automatically assigns a default agent when a new Policy is created.



Apex Triggers:

- Trigger Type: before insert
- Function: Calls PolicyHandler class to assign default agents.

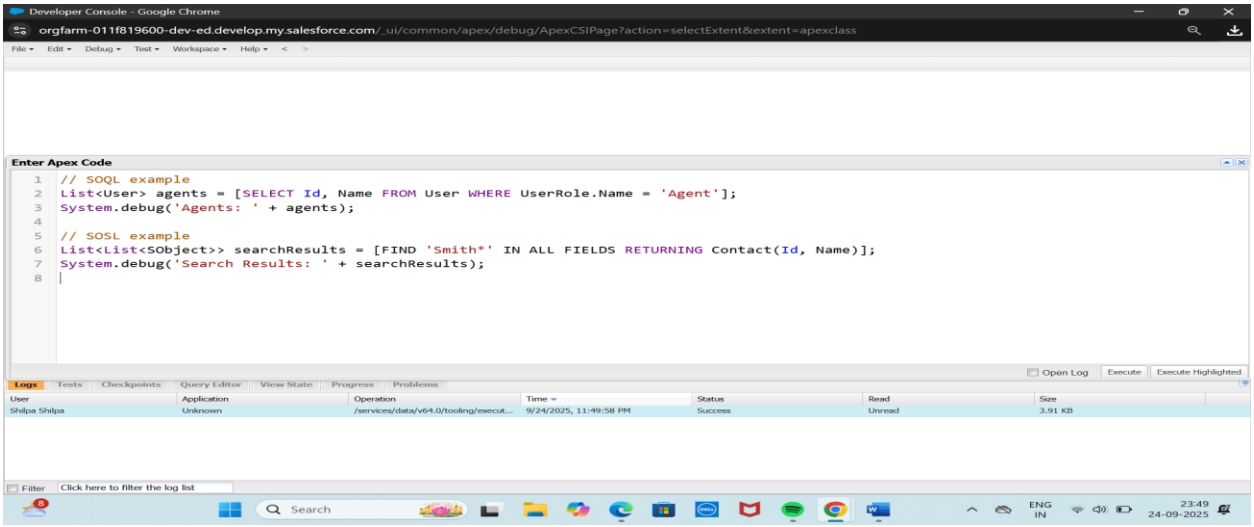


Trigger Design Patterns:

One Trigger per Object

Handler Classes

Bulk-Safe loops over Trigger.new

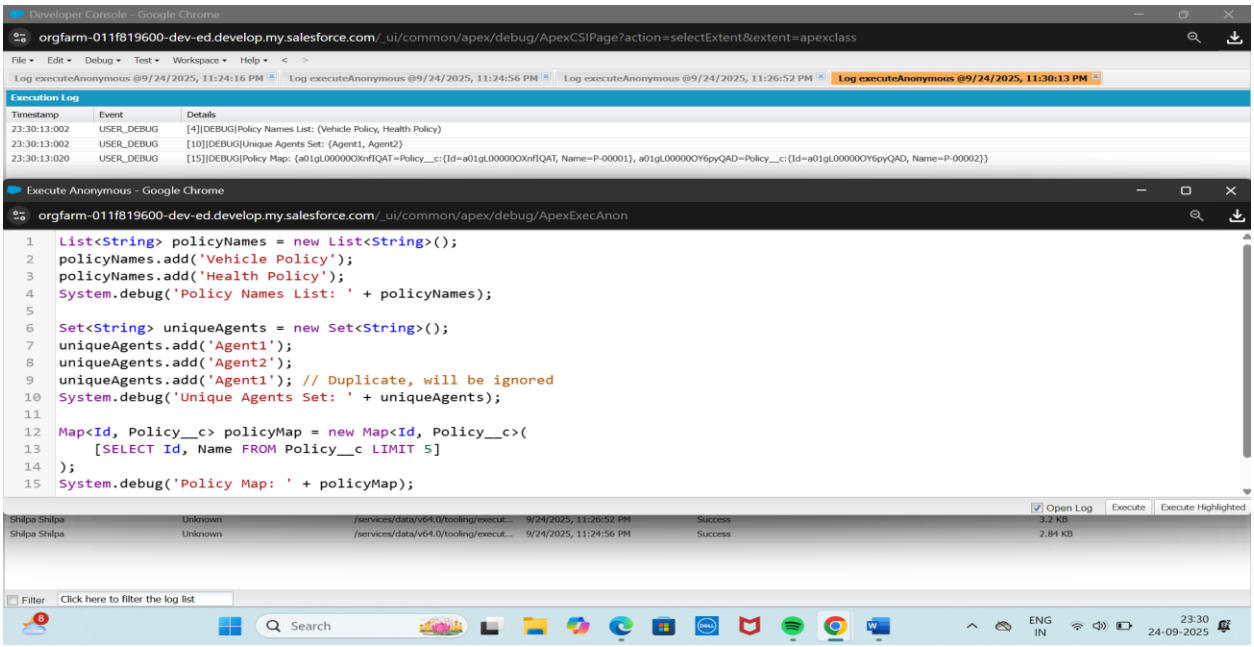


Collections (List, Set, Map):

- List: Ordered collection

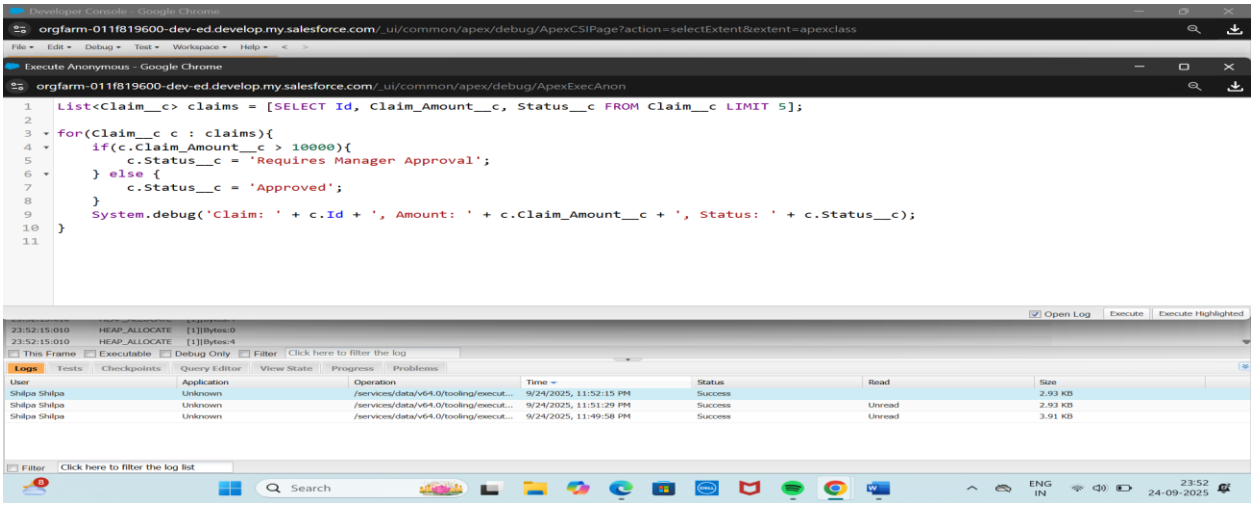
- Set: Unique elements

- Map: Key-value pairs



Control Statements:

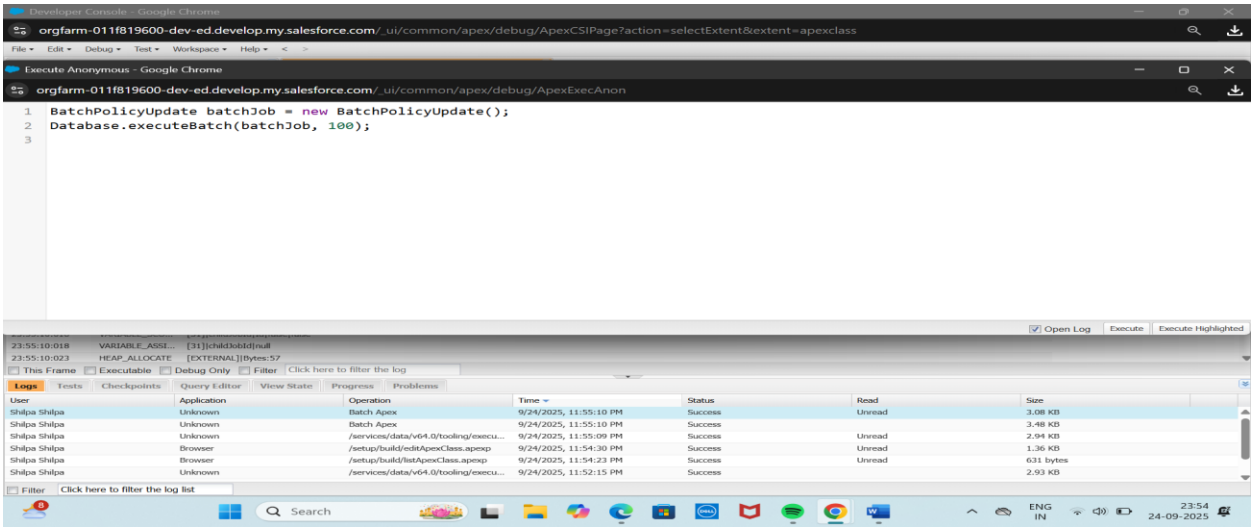
- if-else, for loops, while loops



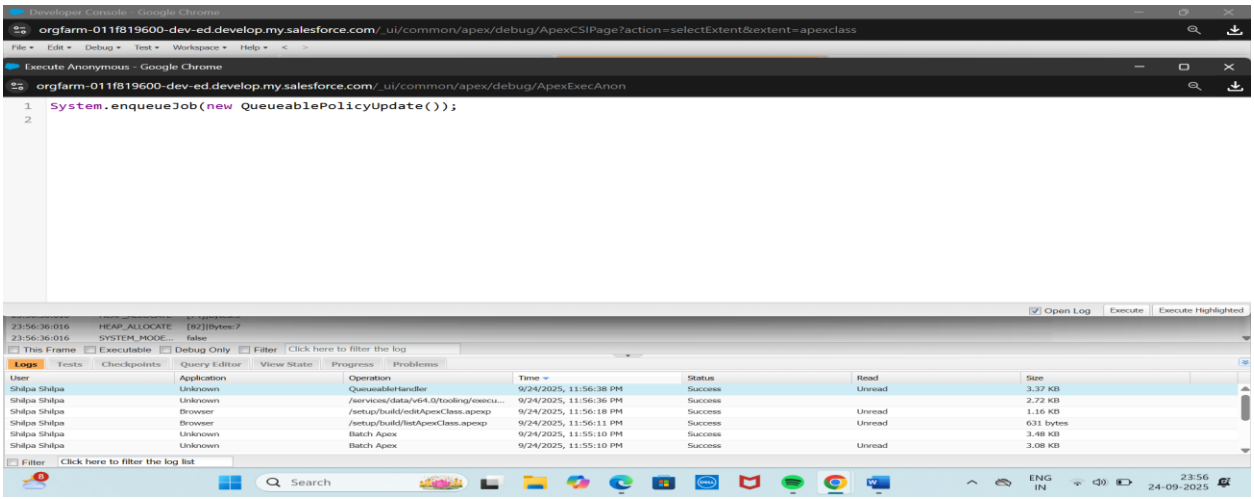
Batch Apex:

```
global class BatchPolicyUpdate implements Database.Batchable<sObject> {
    global Database.QueryLocator start(Database.BatchableContext BC){
        return Database.getQueryLocator('SELECT Id FROM Policy__c WHERE Status__c = NULL');
    }
    global void execute(Database.BatchableContext BC, List<Policy__c> scope){
        for(Policy__c p : scope){
            p.Status__c = 'Pending';
        }
        update scope;
    }
```

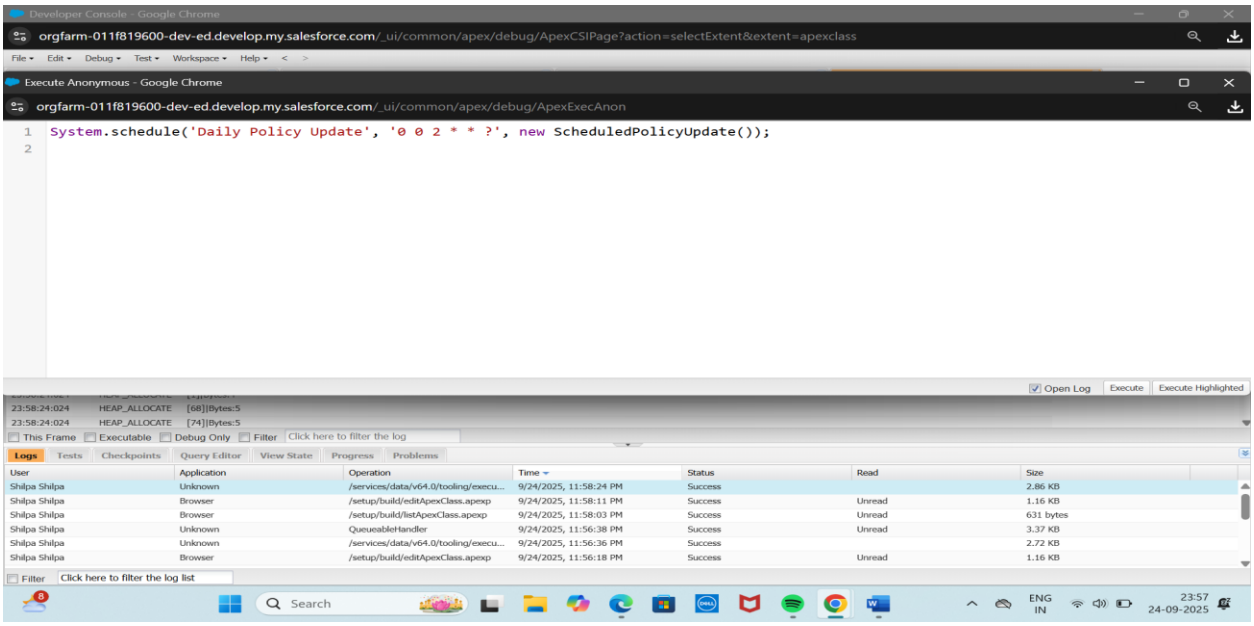
```
    global void finish(Database.BatchableContext BC){}
}
```



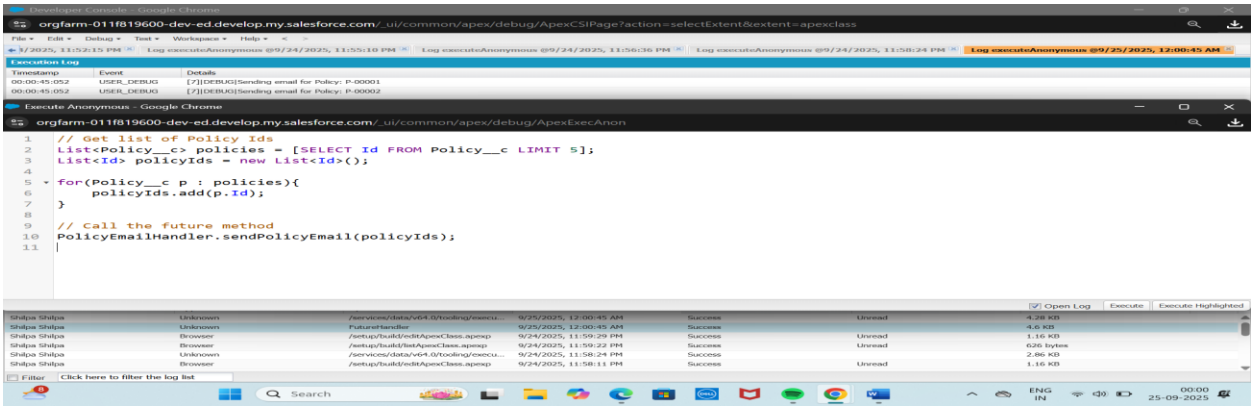
Queueable Apex:



Scheduled Apex:



Future Methods:



Exception Handling:

```
try {
    insert newPolicies;
} catch(DmlException e) {
    System.debug('Error inserting policies: ' + e.getMessage());
}
```

Test Classes: