Date	20-6-2025
Team ID	LTVIP2025MID29669
Project Name	Airlines Management system
Maximum Marks	

Chapter – 12

12. Appendix (Apex Code)

? Appendix: Apex Code for Salesforce-Based Airline Management System

Here's a sample of how Apex code might be structured in your airline management system project. This appendix typically includes triggers, classes, and methods that automate business logic like flight scheduling, pilot assignment, and email notifications.

☒ 1. Trigger: Flight Schedule Status Update

apex

```
trigger UpdateFlightStatus on FlightSchedule__c (before insert, before
update) {
    for (FlightSchedule__c fs : Trigger.new) {
        if (fs.DepartureDateTime__c != null && fs.ArrivalDateTime__c != null)
{
            if (fs.DepartureDateTime__c > fs.ArrivalDateTime__c) {
                fs.addError('Departure cannot be after arrival.');
            }
        }
        if (fs.Status__c == null) {
            fs.Status__c = 'Open';
        }
    }
}
```

□☒ 2. Class: Pilot Assignment Notification

apex

```
public class PilotNotification {
    public static void sendPilotEmail(Id pilotId, String flightName, DateTime
departure, DateTime arrival) {
        Contact pilot = [SELECT Email FROM Contact WHERE Id = :pilotId LIMIT
1];
        if (pilot.Email != null) {
            Messaging.SingleEmailMessage email = new
Messaging.SingleEmailMessage();
            email.setToAddresses(new String[] {pilot.Email});
            email.setSubject('Flight Assignment Notification');
```

```
            email.setPlainTextBody('You have been assigned to flight ' +
flightName +
                                   ' departing at ' + departure + ' and
arriving at ' + arrival + '.');
            Messaging.sendEmail(new Messaging.SingleEmailMessage[] {email});
        }
    }
}
```

□ 3. Utility Method: Calculate Flight Duration

apex

```
public class FlightUtils {
    public static String calculateDuration(DateTime departure, DateTime
arrival) {
        Long durationMillis = arrival.getTime() - departure.getTime();
        Long minutes = durationMillis / (1000 * 60);
        Long hours = minutes / 60;
        minutes = minutes % 60;
        return hours + ' Hours ' + minutes + ' Minutes';
    }
}
```

These examples reflect common logic used in Salesforce airline systems. You can expand this appendix with test classes, batch jobs, or asynchronous processes depending on your project scope.