Assignment 1

Question 1: Groom the user story.
   a. Mention any clarifications required in the user story acceptance criteria.
      ● What is supposed to happen when a user cancels a ticket on the exact boundary day. For example: Day 60, 30, 10 or 1.
      ● How to deal with cancellation in case of train failure or natural disaster? Should the refund be made or not?
      ● What amount should be refunded in case the user has used any discount or promotional coupon while booking the ticket.
      ● What should be the status of the ticket after the journey date? Should there be an exception for cancellation in such a case?
      ● What should be the content of the email sent to the user upon booking the ticket?
      ● How soon should the refund be processed and credited to the user in case of ticket cancellation?
   b. Mention questions for scope of requirements.
      ● Is the refund process only applicable to train tickets? Can it be applied to other tickets of other transportation mediums?
      ● Can there be a variety of tickets like Economy, General, or Business class?

Question 2: Test Coverage Scenarios for the User Story.
   a. Cancel Button Visibility:
      ● Verify that the button is displayed for tickets with a journey date greater than or equal to current date.
      ● Verify that the button is not displayed for tickets with a journey date earlier than the current date.
   b. Notify through Email:
      ● Verify that an email is sent to the user after successfully cancelling the ticket which includes details such as ticket number, refund amount.
   c. Refund Verification:
      ● Verify that the refund amount is accurately calculated and processed according to the business rules.
   d. Ticket status:
      ● Verify that the system handles status of tickets properly, now-refundable tickets or tickets with discounts.
   e. Refund amount calculation and test:
      ● Verify that 70% refund is made after ticket cancellation before exactly 60 days or before the journey date.
      ● Verify that 50% refund is made after ticket cancellation between exactly 60 days and 30 days before the journey date.
      ● Verify that 35% refund is made after ticket cancellation between exactly 30 days and 10 days before the journey date.
      ● Verify that 20% refund is made after ticket cancellation before exactly 10 days and 1 day before the journey date.

Question 3: Test Cases for the Refund Amount calculations for User Story

Test Case ID	Test Case Description	Input	Expected Output
TC01	Refund 70% for cancellation made 60+ days before the journey	Ticket Cost: ₹1000, Cancel: 61 days before journey date	Refund: ₹700
TC02	Refund 50% for cancellation made 30-60 days before the journey	Ticket Cost: ₹1000, Cancel: 45 days before journey date	Refund: ₹500
TC03	Refund 35% for cancellation made 10-30 days before the journey	Ticket Cost: ₹1000, Cancel: 15 days before journey date	Refund: ₹350
TC04	Refund 20% for cancellation made 1-10 days before the journey	Ticket Cost: ₹1000, Cancel: 5 days before journey date	Refund: ₹200
TC05	No refund if the journey date has already passed	Ticket Cost: ₹1000, Cancel: 1 day after journey date	Refund: ₹0

Question 4:

4.a: Use boundary Value analysis technique and provide the set of data which you will take for testing.

Test Case	Input (Days before Journey)	Expected Refund
TC01	61	70%
TC02	60	70%
TC03	59	50%
TC04	31	50%

TC05	30	50%
TC06	29	35%
TC07	11	35%
TC08	10	35%
TC09	9	20%
TC10	1	20%
TC11	0	0%
TC12	-1	0%

4.b: Use equivalence partitioning technique and create test data which you will use for Testing.

Partition ID	Input Range (Days before Journey)	Representative	Expected Refund (%)
EP01	>= 60	65	70%
EP02	30-59	45	50%
EP03	10-29	20	35%
EP04	1-9	5	20%
EP05	<= 0	-2	0%

Assignment 2

Decision Table:

Customer Type	Payment Method	Order Size (>= 50 Unit)	Discount Offered
Retail Outlet	Cash On Delivery	Yes	4% (2% + 2%)
Retail Outlet	Cash On Delivery	No	2%
Retail Outlet	Other Payment	Yes	2%
Retail Outlet	Other Payment	No	0%
Wholesale Outlet	Cash On Delivery	Yes	6% (2% + 2% + 2%)
Wholesale Outlet	Cash On Delivery	No	4% (2% + 2%)
Wholesale Outlet	Other Payment	Yes	4% (2% + 2%)
Wholesale Outlet	Other Payment	No	2%