

Lab Task 3

ID: 232-35-076

Name: Afrim Hossen Khan

Question 1: Online Ticket Booking – Number of Tickets

An online ticket booking system allows a user to book **1 to 5 tickets** at a time. Identify the equivalence partitions and create test cases.

Question 2: Mobile Number Validation

A mobile number must be exactly **10 digits** and start with 7, 8, or 9. Identify the equivalence partitions and create test cases.

Question 3: Email Address Validation

A registration form requires a valid email address. The rules:

- Must contain “@”
- Must contain a domain **after** “@” (e.g., gmail.com)

Identify the equivalence partitions and create test cases.

01 Answer

Step 1: Identify the input domain

- Valid inputs: Number of tickets from 1 to 5.
- Invalid inputs: Numbers less than 1 or greater than 5, and non-numeric inputs.

Step 2: Define equivalence partitions

Partition Type	Description	Example Test Case
Valid	Number of tickets between 1 and 5	2
Invalid	Number of tickets less than 1	0
Invalid	Number of tickets greater than 5	7
Invalid	Non-numeric input (letters or symbols)	?

Step 3: Write test cases

Valid input: 2 → Expected: Booking successful

Invalid (less than 1): 0 → Expected: Error "Minimum 1 ticket required"

Invalid (greater than 5): 7 → Expected: Error "Maximum 5 tickets allowed"

Invalid (non-numeric): "?" → Expected: Error "Invalid input, enter a number"

02 Answer:

Step 1:

- Valid inputs: Exactly **10 digits** and **starting with 7, 8, or 9**.
- Invalid inputs: **Less or more than 10 digits, not starting with 7/8/9, or containing non-digit characters.**

Step 2: Define equivalence partitions

Partition Type	Description	Example Test Case
Valid	10 digits, starting with 7, 8, or 9	8123456789
Invalid	Less than 10 digits	78965432

Invalid	More than 10 digits	91234567890
Invalid	Does not start with 7, 8, or 9	6123456789
Invalid	Contains non-digit characters	88965O4321

Step 3: Write test cases

Valid input: 8123456789 → Expected: Mobile number accepted

Invalid (less than 10 digits): 78965432 → Expected: Error "Mobile number must be exactly 10 digits"

Invalid (more than 10 digits): 91234567890 → Expected: Error "Mobile number must be exactly 10 digits"

Invalid (does not start with 7, 8, or 9): 6123456789 → Expected: Error "Mobile number must start with 7, 8, or 9"

Invalid (contains non-digit characters): 88965O4321 → Expected: Error "Mobile number must contain digits only"