**Lab Task 3**

**ID:**

**Name:**

**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.

### ****Sample Question and Answer****

An online shopping website allows customers to enter a **discount coupon code**. The rules are:

* The code must be exactly **8 characters long**.
* It can contain only **uppercase letters (A–Z) and digits (0–9)**.

Identify the equivalence partitions and create test cases

**Answer:**

**Step 1: Identify the input domain**

* Valid codes: exactly 8 characters, letters A–Z and digits 0–9.
* Invalid codes: shorter or longer than 8 characters, or containing special characters or lowercase letters.

**Step 2: Define equivalence partitions**

| **Partition Type** | **Description** | **Example Test Case** |
| --- | --- | --- |
| **Valid** | 8 characters, uppercase letters & digits | AB12CD34 |
| **Invalid** | Less than 8 characters | A1B2C3 |
| **Invalid** | More than 8 characters | AB12CD345 |
| **Invalid** | Contains lowercase letters | Ab12CD34 |
| **Invalid** | Contains special characters | AB12#D34 |

**Step 3: Write test cases**

1. **Valid input:** AB12CD34 → Expected: Coupon accepted
2. **Invalid (too short):** A1B2C3 → Expected: Error "Code must be 8 characters"
3. **Invalid (too long):** AB12CD345 → Expected: Error "Code must be 8 characters"
4. **Invalid (lowercase letters):** Ab12CD34 → Expected: Error "Invalid characters"
5. **Invalid (special characters):** AB12#D34 → Expected: Error "Invalid characters"

**Question:**

A mobile app allows users to set their age for profile creation. The valid age range is **18 to 60 years**. Identify the equivalence partitions and create test cases for each partition.

**Answer:**

**Step 1: Identify the input domain**

* Valid age: 18 – 60
* Invalid age: <18 or >60

**Step 2: Define equivalence partitions**

| **Partition Type** | **Range / Description** | **Example Test Case** |
| --- | --- | --- |
| **Valid** | 18 – 60 | 25 |
| **Invalid** | Less than 18 | 16 |
| **Invalid** | Greater than 60 | 65 |
| **Invalid** | Non-numeric input | "Twenty" |

**Step 3: Write test cases**

1. **Valid input:** 25 → Expected: Profile created successfully
2. **Invalid input (too low):** 16 → Expected: Error message "Age must be 18 or older"
3. **Invalid input (too high):** 65 → Expected: Error message "Age must be 60 or younger"
4. **Invalid input (non-numeric):** "Twenty" → Expected: Error message "Please enter a valid number"

### ****Question 2: Loan Amount Input****

A bank allows customers to apply for a loan **between 10,000 and 1,000,000**.

**Answer:**

**Equivalence Partitions**

| **Partition Type** | **Description** | **Example Test Case** |
| --- | --- | --- |
| Valid | 10,000–1,000,000 | 500,000 |
| Invalid | Less than 10,000 | 5,000 |
| Invalid | More than 1,000,000 | 1,500,000 |
| Invalid | Non-numeric input | "Five lakh" |

**Test Cases**

1. Valid: 500000 → Accepted
2. Invalid (<10,000): 5000 → Error: "Loan amount too low"
3. Invalid (>1,000,000): 1500000 → Error: "Loan amount too high"
4. Invalid (non-numeric): "Five lakh" → Error: "Enter a valid number