

Test Cases Report

Test Case Structure

Each test case involves:

1. User Input: Selection between random or manual customer data entry, maximum waiting times, and detailed customer data for each work shift.
2. Expected Output: System calculation of the minimum number of clerks needed for each work shift and customer type.

Test Case 1: Manual Customer Data Entry

User Input

1. User selects option 2 for manual data entry.
2. Maximum Waiting Times in mins:
 - for Commercial enter 4
 - For Loans enter 6
 - For Casual enter 7
3. Customer Data:
 - For Shift 1 (5 customers): 09:01 2 1 09:02 10 2 09:30 12 2 10:00 11 2 10:01 12 3
 - Shift 2 (5 customers): 13:01 2 1 13:02 10 2 13:30 12 2 14:03 11 2 14:11 12 3
 - Shift 3 (4 customers): 18:01 2 1 18:02 10 2 18:30 12 2 19:00 11 2

Expected Output

- Maximum Waiting Times:
 - Commercial: 4 minutes
 - Loans: 6 minutes
 - Casual: 7 minutes
- Minimum Clerks Needed:
 - Shift 1: Commercial: 1, Loans: 1, Casual: 1
 - Shift 2: Commercial: 1, Loans: 1, Casual: 1
 - Shift 3: Commercial: 1, Loans: 0, Casual: 1

Customer Details

- Shift 1:
 - Commercial: 09:01 (2 min)
 - Loans: 10:01 (12 min)
 - Casual: 09:02 (10 min), 09:30 (12 min), 10:00 (11 min)
- Shift 2:
 - Commercial: 13:01 (2 min)
 - Loans: 14:11 (12 min)
 - Casual: 13:02 (10 min), 13:30 (12 min), 14:03 (11 min)
- Shift 3:

Commercial: 18:01 (2 min)

Casual: 18:02 (10 min), 18:30 (12 min), 19:00 (11 min)

Test Case 2: Manual Customer Data Entry

User Input

1. User selects option 2 for manual data entry.
2. Maximum Waiting Times in mins:
 - for Commercial enter 3
 - For Loans enter 5
 - For Casual enter 6
3. Customer Data:
 - For Shift 1 (3 customers): 09:31 3 1 09:52 8 2 10:30 11 3
 - Shift 2 (3 customers): 12:35 4 1 14:59 7 2 16:02 10 3
 - Shift 3 (3 customers): 17:20 3 1 18:20 7 2 20:51 9 3

Expected Output

- Maximum Waiting Times:
 - Commercial: 3 minutes
 - Loans: 5 minutes
 - Casual: 6 minutes
- Minimum Clerks Needed:
 - Shift 1: Commercial: 1, Loans: 1
 - Shift 2: Commercial: 1, Loans: 1, Casual: 1
 - Shift 3: Commercial: 1, Loans: 1, Casual: 1

Customer Details

- Shift 1:
 - Commercial: 09:31 (3 min)
 - Loans: 10:30 (11 min)
 - Casual: 09:52 (8 min)
- Shift 2:
 - Commercial: 12:35 (4 min)
 - Loans: 16:02 (10 min)
 - Casual: 14:59 (7 min)
- Shift3:
 - Commercial: 17:20 (3 min)
 - Casual: 18:20 (7 min)