|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Question1** |  | |  | |  | | |  |  | |
| **Test Case** | | **Inputs** | | **Expected Outputs** | | | | | |
| **Account Balance** | | **Final Balance** | | **Gift Card** | **Account Status** | | |
|
| 1 | | -$0.99 | | -$35.00 | | No | No Status | | |
| 2 | | $0.00 | | -$35.00 | | No | No Status | | |
| 3 | | $0.01 | | $0.01 | | No | No Status | | |
| 4 | | $2,000.00 | | $2,043.00 | | No | No Status | | |
| 5 | | $2,000.01 | | $2,047.01 | | No | No Status | | |
| 6 | | $7,500.00 | | $7,676.25 | | No | No Status | | |
| 7 | | $7,500.01 | | $7,691.26 | | No | No Status | | |
| 8 | | $14,999.99 | | $15,382.49 | | No | No Status | | |
| 9 | | $15,000.00 | | $15,442.50 | | No | No Status | | |
| 10 | | $25,000.00 | | $25,787.50 | | No | No Status | | |
| 11 | | $25,000.01 | | $25,787.51 | | No | No Status | | |
| 12 | | $29,999.99 | | $30,944.99 | | No | No Status | | |
| 13 | | $30,000.00 | | $30,975.00 | | Yes | Honored | | |
| 14 | | $30,000.01 | | $30,975.01 | | Yes | Honored | | |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Question2** |  | |  | |  | |  |  | |
| **Test Case** | | **Input** | | | | **Expected Output** | | |
| **LDT** | | **Day Type** | | **Rate (pass./Hour)** | | |
| 1 | | 12:00:00 AM | | HOLIDAY | | 814 | | |
| 2 | | 5:00:00 AM | | HOLIDAY | | 814 | | |
| 3 | | 5:00:01 AM | | HOLIDAY | | 4194 | | |
| 4 | | 8:59:59 AM | | HOLIDAY | | 4194 | | |
| 5 | | 9:00:00 AM | | HOLIDAY | | 814 | | |
| 6 | | 2:59:59 PM | | HOLIDAY | | 814 | | |
| 7 | | 3:00:00 PM | | HOLIDAY | | 4194 | | |
| 8 | | 5:59:59 PM | | HOLIDAY | | 4194 | | |
| 9 | | 6:00:00 PM | | HOLIDAY | | 814 | | |
| 10 | | 11:59:59 PM | | HOLIDAY | | 814 | | |
| 11 | | 12:00:00 AM | | WEEKEND | | 180 | | |
| 12 | | 5:00:00 AM | | WEEKEND | | 180 | | |
| 13 | | 5:00:01 AM | | WEEKEND | | 932 | | |
| 14 | | 8:59:59 AM | | WEEKEND | | 932 | | |
| 15 | | 9:00:00 AM | | WEEKEND | | 180 | | |
| 16 | | 2:59:59 PM | | WEEKEND | | 180 | | |
| 17 | | 3:00:00 PM | | WEEKEND | | 932 | | |
| 18 | | 5:59:59 PM | | WEEKEND | | 932 | | |
| 19 | | 6:00:00 PM | | WEEKEND | | 180 | | |
| 20 | | 11:59:59 PM | | WEEKEND | | 180 | | |
| 21 | | 12:00:00 AM | | WEEKDAY | | 226 | | |
| 22 | | 5:00:00 AM | | WEEKDAY | | 226 | | |
| 23 | | 5:00:01 AM | | WEEKDAY | | 1165 | | |
| 24 | | 8:59:59 AM | | WEEKDAY | | 1165 | | |
| 25 | | 9:00:00 AM | | WEEKDAY | | 226 | | |
| 26 | | 2:59:59 PM | | WEEKDAY | | 226 | | |
| 27 | | 3:00:00 PM | | WEEKDAY | | 1165 | | |
| 28 | | 5:59:59 PM | | WEEKDAY | | 1165 | | |
| 29 | | 6:00:00 PM | | WEEKDAY | | 226 | | |
| 30 | | 11:59:59 PM | | WEEKDAY | | 226 | | |

**Question 3**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case** | **Input** | **Expected Output** | | | |
| **Distance from stop (Feet)** | **Red Light** | **Yellow Light** | **Green Light** | **Buzzer** |
|
|
| 1 | 0.00 | Yes | Yes | Yes | Yes |
| 2 | 0.01 | Yes | Yes | Yes | Yes |
| 3 | 25.00 | Yes | Yes | Yes | Yes |
| 4 | 25.01 | Yes | Yes | Yes | No |
| 5 | 50.00 | Yes | Yes | Yes | No |
| 6 | 50.01 | Yes | Yes | No | No |
| 7 | 75.00 | Yes | Yes | No | No |
| 8 | 75.01 | Yes | No | No | No |
| 9 | 100.00 | Yes | No | No | No |
| 10 | 100.01 | No | No | No | No |

**Question 4**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test Case** | **Input** | **Expected Outpuuts** | | |
| **Account Balance** | **Final Balance** | **Gift Card** | **Account Status** |
|
| 1 | $45,000.00 | $46,462.50 | Yes | Honored |
| 2 | $45,000.01 | $46,462.51 | Yes | Honored |
| 3 | $54,999.99 | $56,787.49 | Yes | Top-Status |
| 4 | $55,000.00 | $56,787.50 | Yes | Top-Status |

**Question 5**

**A)**

**1)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Conditions** | **Rules** | | | | | | |
| **Rule 1** | **Rule 2** | **Rule 3** | **Rule 4** | **Rule 5** | **Rule 6** | **Rule 7** |
| Balance <= $0 | Yes | No | No | No | No | No | No |
| $0.01<= Balance <= $2000.00 | No | Yes | No | No | No | No | No |
|
|
| $2000.01<= Balance <= $7500.00 | No | No | Yes | No | No | No | No |
|
|
| $7501.01<= Balance <=14999.99 | No | No | No | Yes | No | No | No |
|
|
| $15000.00<= Balance <=$25000.00 | No | No | No | No | Yes | No | No |
|
|
| $25000.01<= Balance <=$2999.99 | No | No | No | No | No | Yes | No |
|
|
| $30000.00 <= Balance | No | No | No | No | No | No | Yes |
|
|
|  |  |  |  |  |  |  |  |
| **Action** | | | | | | | |
| **Interest Rate** | 0.00% | 2.15% | 2.35% | 2.55% | 2.95% | 3.15% | 3.23% |
| **Fee** | $ 35.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| **Status** | No Status | No Status | No Status | No Status | No Status | No Status | Honered |
| **Gift Card** | No | No | No | No | No | No | Yes |

**2)** No. of test Cases = Max\_of(2\* no. of ECP, No. of rule) = 2\*7 = 14

**3) YES**

**B)**

**1)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Conditions** | **Rule1** | **Rule2** | **Rule3** | **Rule4** | **Rule5** | **Rule6** | **Rule7** | **Rule8** | **Rule9** | **Rule10** | **Rule11** | **Rule12** | **Rule13** | **Rule14** | **Rule15** |
| Holiday | No | No | No | No | No | No | No | No | No | No | Yes | Yes | Yes | Yes | Yes |
| Weekend | No | No | No | No | No | Yes | Yes | Yes | Yes | Yes | No | No | No | No | No |
| Weekday | Yes | Yes | Yes | Yes | Yes | No | No | No | No | No | No | No | No | No | No |
| 12:00:00AM<= time <=5:00:00 AM | Yes | No | No | No | No | Yes | No | No | No | No | Yes | No | No | No | No |
| 5:00:01 AM<= time <= 8:59:59AM | No | Yes | No | No | No | No | Yes | No | No | No | No | Yes | No | No | No |
| 9:00:00 AM<= time <= 2:59:59 PM | No | No | Yes | No | No | No | No | Yes | No | No | No | No | Yes | No | No |
| 3:00:00 PM<= time <= 5:59:59 PM | No | No | No | Yes | No | No | No | No | Yes | No | No | No | No | Yes | No |
| 6:00:00 PM<= time <= 11:59:59 PM | No | No | No | No | Yes | No | No | No | No | Yes | No | No | No | No | Yes |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Action** | | | | | | | | | | | | | | | |
| Rate(Passenger/Hour | 226 | 1165 | 226 | 1165 | 226 | 180 | 932 | 180 | 814 | 4194 | 814 | 4194 | 814 | 4194 | 814 |

**2)** No. of test cases= Max\_of(2\* no. of ECP, No. of rule)= 2\*15=30

**3) Yes**

**C)**

**1)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Condition** | **Rule 1** | **Rule 2** | **Rule 3** | **Rule 4** | **Rule 5** |
| 100.01<= Distance <= -∞ | Yes | No | No | No | No |
| 75.01<= Distance <= 100.00 | No | Yes | No | No | No |
| 50.01<= Distance <= 75.00 | No | No | Yes | No | No |
| 25.01<= Distance <= 50.01 | No | No | No | Yes | No |
| 0.00 <= Distance <= 25.00 | No | No | No | No | Yes |
|  |  |  |  |  |  |
| **Action** | | | | | |
| Red | No | Yes | Yes | Yes | Yes |
| Yellow | No | No | Yes | Yes | Yes |
| Green | No | No | No | Yes | Yes |
| Buzzer | No | No | No | No | Yes |

**2)** No. of test cases =Max\_of(2\* no. of ECP, No. of rule) =2\*5=10

**3) Yes**

**Question 6**

