



IARE
INSTITUTE OF
AERONAUTICAL ENGINEERING
(An Autonomous Institute affiliated to JNTUH, Hyderabad)
Dundigal, Hyderabad - 500 043

LABORATORY WORK BOOK

Name of the Student : HIMAKAR C

Class : CSE - B Semester : VI

Course Code : ACSC09 Course Name : SQAT Laboratory

Name of the Course Faculty : Mr. ACHYUTHA SURESH BABU Faculty ID : IARE10996

Exercise Number : 6.1 Week Number : 06 Date : 21/5/2024

Roll Number									
2	1	9	5	1	A	0	5	6	5

			Week Number	06	Date			21.11.20	
S. No.	Exercise Number	EXERCISE NAME	MARKS AWARDED						
			Aim/ Preparation	Algorithm / Procedure		Source Code	Program Execution	Viva - Voce	Total
				Performance in the Lab		Calculations and Graphs	Results and Error Analysis		
			4	4		4	4	4	20
1	6.1	Discount based on their age & membership	4		4	4	4	4	20
2	6.2	Loan Approval System							
3	6.3	Traffic light Control system							
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Himakar C
Signature of the Student

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Signature of the Faculty

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Q.1 Discount based on their age & membership status
Design testcases to ensure a person is eligible for a discount based on their age and membership.

```
a = int(input('Enter age: '))
s = input('Enter membership status: ').lower()
if s == 'yes':
    if a > 60:
        print('Discount availed is 20%')
    else:
        print('Discount availed is 10%')
else:
    print('No discount')
```

Condition	Member	Age > 60	Discount
Eligible for 20% Discount	yes	yes	20%
Eligible for 10% Discount	yes	No	10%
Not Eligible	No	yes	No discount
Not Eligible	No	No	No discount

6.2 Loan Approval System
 Design test cases to ensure coverage of all possible scenarios & conditions for loan.

```
s1 = input('Enter Income status: ').lower()
s2 = input('Enter Credit Score status: ').lower()
```

```
if s1 == 'high' and s2 == 'high':
```

```
    print('Eligible for loan')
```

```
else:
```

```
    print('Not Eligible for loan')
```

Income	Credit Score	Eligibility
Low	Low	Not Eligible
Low	high	Not Eligible
high	Low	Not Eligible
high	high	Eligible

6.3 Traffic Light Control System

Design testcases for Traffic Light Control System

```

s1 = input('Enter Time of Day: ')
s2 = input('Enter Traffic Density: ').lower()
if s2 == 'high':
    print('Red')
else:
    print('Green')
  
```

Time of Day	Traffic Density	Signal Pattern
Morning	Low	Green
Morning	High	Red
Afternoon	Low	Green
Afternoon	High	Red
Evening	Low	Green
Evening	High	Red
Night	Low	Green
Night	High	Red