

LAB ASSESSMENT – 1

Q1.

1) Partition the domain of each parameter into equivalence classes and label the classes and list them.

Ans.

- **Input classes :**

Risk Probability

RP1 : 1-5

RP2 : input other than integer

RP3 : out of range

Risk Impact

RI1 : 1-5

RI2 : input other than integer

RI3 : out of range

- **Output classes :**

Risk Exposure

High : $RP1 * RI1 > 9$

Moderate : $RP1 * RI1 < 10 \ \&\& \ > 2$

Low : $RP1 * RI1 \leq 2$

Invalid

Out of range

2) Develop a set of test cases for the app.... set of test cases.

Test No.	Input		Expected output	Actual output
	RP	RI		
1.	3	3	MODERATE	MODERATE

2.	3	A	INVALID	INVALID
3.	3	10	OUT OF RANGE	OUT OF RANGE
4.	A	3	INVALID	INVALID
5.	A	A	INVALID	INVALID
6.	A	10	INVALID	INVALID
7.	10	1	OUT OF RANGE	OUT OF RANGE
8.	10	A	OUT OF RANGE	OUT OF RANGE
9.	10	10	OUT OF RANGE	OUT OF RANGE

3) To better test the classification performed by the app, partition the output domain and develop additional test cases to cover any class not covered by your test cases in (2).

Ans. As we can see in the below table, that all the input and output classes are covered in the developed test cases. So no need to separate the output domain here.

Test No.	Input		Expected output
	RP	RI	
1.	RP1	RP1	HIGH/MODERATE/LOW
2.	RP1	RI2	INVALID
3.	RP1	RI3	OUT OF RANGE
4.	RP2	RI1	INVALID
5.	RP2	RI2	INVALID
6.	RP2	RI3	INVALID
7.	RP3	RP1	OUT OF RANGE
8.	RP3	RI2	OUT OF RANGE
9.	RP3	RI3	OUT OF RANGE

Q2. Develop a complete limited entry decision table for the situation given in the question.

Ans.

Conditions :

Age : >18, 2 > && <=18, 2

Destination : In Germany, Outside Germany

WeekDays : Monday or Friday, Other weekdays except (M&F)

Number of days : < 6 days, >= 6 days

Output :

Discount : 10%, 20%, 25%, 30%, 40%, FREE, NONE

Decision table test cases :

Rules	Age	Dest.	WeekDays	No. of days	Output (Discount)
1.	>18	In Germany	Monday or friday	< 6	NONE
2.	>18	In Germany	Monday or friday	>=6	10%
3.	>18	In Germany	Other weekdays	< 6	20%
4.	>18	In Germany	Other weekdays	>=6	30%
5.	>18	Outside Germany	Monday or friday	< 6	NONE
6.	>18	Outside Germany	Monday or friday	>=6	NONE
7.	>18	Outside Germany	Other weekdays	< 6	25%
8.	>18	Outside Germany	Other weekdays	>=6	25%

9.	2> && <=18	In Germany	Monday or friday	< 6	40%
10.	2> && <=18	In Germany	Monday or friday	>=6	40%
11.	2> && <=18	In Germany	Other weekdays	< 6	40%
12.	2> && <=18	In Germany	Other weekdays	>=6	40%
13.	2> && <=18	Outside Germany	Monday or friday	< 6	40%
14.	2> && <=18	Outside Germany	Monday or friday	>=6	40%
15.	2> && <=18	Outside Germany	Other weekdays	< 6	40%
16.	2> && <=18	Outside Germany	Other weekdays	>=6	40%
17.	2	In Germany	Monday or friday	>=6	FREE
18.	2	In Germany	Other weekdays	< 6	FREE
19.	2	In Germany	Other weekdays	>=6	FREE
20.	2	Outside Germany	Monday or friday	< 6	FREE
21.	2	Outside Germany	Monday or friday	>=6	FREE
22.	2	Outside Germany	Other weekdays	< 6	FREE
23.	2	Outside Germany	Other weekdays	>=6	FREE
24.	2	In Germany	Monday or friday	>=6	FREE