Black Box Testing: Black Box Testing is a software testing method in which the functionalities of software applications are tested without having knowledge of internal code structure, implementation details and internal paths. Black Box Testing mainly focuses on input and output of software applications and it is entirely based on software requirements and specifications. It is also known as Behavioral Testing.

Two Types of Black box testing we have to test are :

1.**Equivalence class**.

2.**Boundary value analysis**.

Equivalence class: Define data among classes within range.

Boundary value analysis: Boundary value analysis is one of the widely used case design technique for black box testing. It is used to test boundary values because the input values near the boundary have higher chances of error.

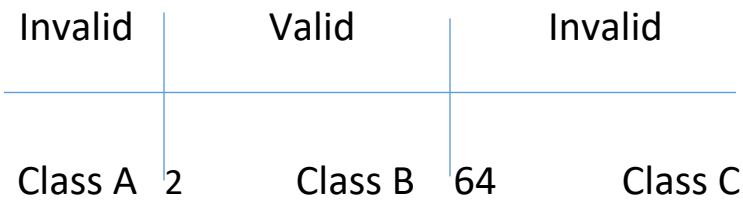
REQUIREMENT:

Loan Application

Customer Name:		2-64 chars
Account Number:		6 digit ,1st non zero
Loan Amount:		500 to 9000 tk
Term:		1 to 30 years

According to this above requirements ,we have to solve this requirements by two types of black box testing…

1. **Equivalence class testing for Customer Name:**



Test no	Class	Test data	Test case
1	A	1	1
2	B	20	2
3	C	100	3

Boundary value testing for Customer Name:

min	Min-1	Min+1	mid	Max-1	max	Max+1
2	1	3	30	63	64	65

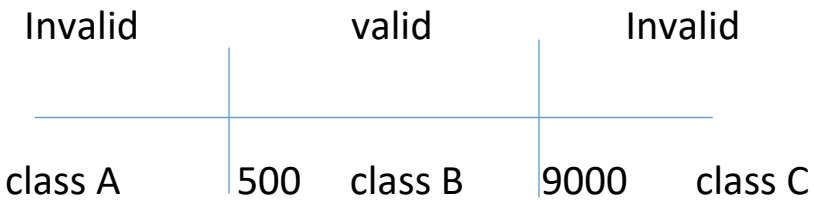
2. **Equivalence class testing for account Number:**

Valid partition	Invalid partition
6 -digit	< 6-digit
1st non zero	1st digit non digit
Up to 6 digit	>6 digit

Boundary value testing for account Number:

Valid boundaries	Invalid boundaries
100000	5 digit
999999	7 digit
1st digit non zero digit	0 digit

3. **Equivalence testing for Loan Amount:**



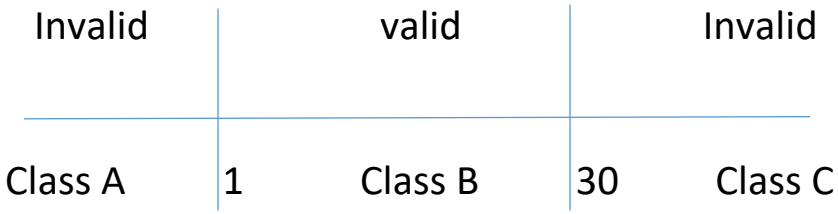
Class	Test Data	Test Case
A	499	1
B	520	2
C	9001	3

Boundary value testing for Loan Amount:

Valid partitions	Invalid partiotions
500	<500
9000	>9000
1st non zero digit	1st zero digit
Numeric	Non numeric

min	Min-1	Min+1	mid	Max-1	max	Max+1
500	499	501	700	8099	9000	9001

4.**Equivalence testing for term:**



Class	Test data	Test Case
A	0	1
B	20	2
C	31	3

Boudary value testing for term:

Valid partitions	Invalid partitions
1-30	<1
1-30	>30
1st digit must have non zero digit	1stly zero digit

min	Min-1	Min+1	mid	Max-1	max	Max+1
1	0	2	15	29	30	31

THANKS FOR EVERYTHING