

(3) (a) Black Box testing

(1) Mostly done by Software testers

(2) No knowledge of implementation is needed.

(3) It can be referred as outer or external software testing

(4) It's functional test of the software

(5) It is the behaviour testing of the software

white box testing

Mostly done by Software developers

knowledge of implementation is required

It is the inner or ~~outer~~ external software testing

Structural test of the software

It is the logic testing of software

Test case generation

- Boundary value analysis :- (Black Box)
It is a type of ~~the~~ Black Box (or) Specification based testing technique in which tests are performed using the boundary values.

• white box

Euclid's GCD algorithm:-

```
int f, (int x, int y) {
```

```
    while (x != y) {
```

```
        if (x > y) then
```

```
            x = x - y;
```



```
    else  $y = y - x$ ;  
  }  
  return  $x$ ;  
}
```

By ~~choosing~~ choosing the test

$\{(x=3, y=3), (x=4, y=3), (x=3, y=4)\}$

(B) Boundary conditions:

Boundary values :- $'\backslash 0'$, $'c'$, $'cc'$

If the value is $'\backslash 0'$ NULL then single character not present in string.

$'c'$ \Rightarrow Yes single character is present in string.

$'cc'$ \Rightarrow No single character is not present in the string.