

Q3) Analyse the white box testing techniques with the examples.

Ans: White box testing is software testing technique in which internal structure, design and coding of software are tested to verify flow of output-input and to improve design, usability & security. In white box testing, code is visible to testers so it is also called clear box testing, open box testing, transparent box testing, code-based testing and glass box testing.

White box testing techniques

- Statement Coverage
- Decision Coverage
- Branch Coverage
- Condition Coverage
- Multiple Condition Coverage

Ex:- printme( int a, int b)

int result = a + b;

if (result > 0)

print("positive", result)

```

else {
    print("Negative", result)
}

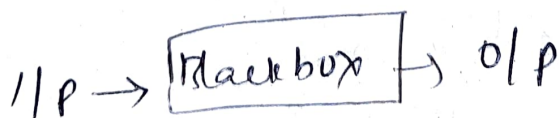
```

$A=1, B=1$   
 $A=-1, B=-3$

white box testing goal is to verify all the decision branches, loops, statement in the code

## Q4) Analyse Black box testing technique with examples

Ans. Black box testing is a software testing method in which the functionalities of S/W applications are tested without having knowledge of internal code structure, implementation details and internal paths. Black box testing mainly focuses on input & output of software applications and is entirely based on S/W requirements and specifications. It is also known as behavioral testing.



Ex. A simple login screen of software or a web application will be tested for security

User login. The login screen has two fields, username and password as an input and the output will be enable access to the System.

- A user logged in where inputs present username and correct password.
- A user receiving an error message when enter username and incorrect password.