**WHITE BOX TETSING**

Focus:

Thoroughness, every statement in the compound is executed at least once.

Four types of white box testing

1. Statement testing

2. Loop testing

3. Path testing

4. Branch testing

Testing:

Statement testing:

"Test single statement"

Loop statement:

* case execution or the loop to be stored completely
* loop to be executed exactly once
* loop to be executed more than once

Path testing:

Make sure all paths in the program are executed

Branch testing:

Make sure that each possible outcome from a condition is tested at least once

If (I=TRUE)

Print ("YES")

Test cases:

1) I=TRUE

2) I=FALSE

WHITE BOX TESTING EXAMPLE:

Find mean (float mean, file score file)

{

Sum of scores (file, score);

While (! EOF (source file))

{

If (score 0.0)

1

Sum of scores (file, score)

}

/\*compute the mean and print the result/\*

If (number of scores>0)

{

Mean-sum of score/number of score;

Print ("the mean score is % f/n", mean);

}

Else

{

Print (no scores found in file /n/n");

}

}

Simple loop Instructed loop Nested loop Concatenated loop

Result:

Thus the program was executed successfully.