Question : Find cyclomatic complexity and test case of following code

```
a = 10
if b>c then
a = b
else
a = c
end if
print a
print b
print c
```

Solution:

Cyclomatic Complexity V(G) = E - N + 2*P

where,

E = number of edges in the flow graph.

N = number of nodes in the flow graph.

P = number of nodes that have exit points.

The Cyclomatic complexity is calculated using the above control flow diagram that shows seven nodes (shapes) & eight edges (lines). In the flow graph diagram the values of E, N, P are

E = 7

N = 7

P = 1

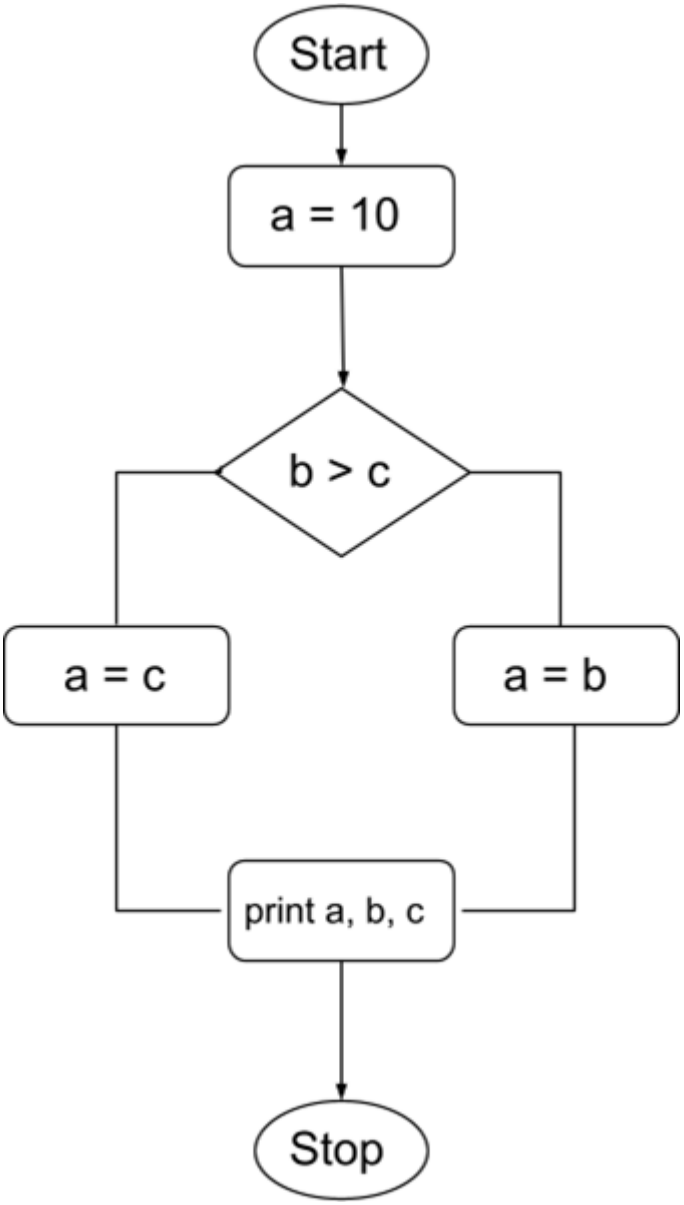
Hence, the cyclomatic complexity of the given pseudocode is

V(G) = 7 - 7 + 2

= 2

To achieve branch coverage the number of test cases should be equivalent to the cyclomatic complexity of the program.

So,We need at least 2 test cases to cover all the branches of the given pseudocode.


Start
a = 10
b > c
a = c
a = b
print a, b, c
Stop