2018ICSE0621

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Part - C

Q.1]

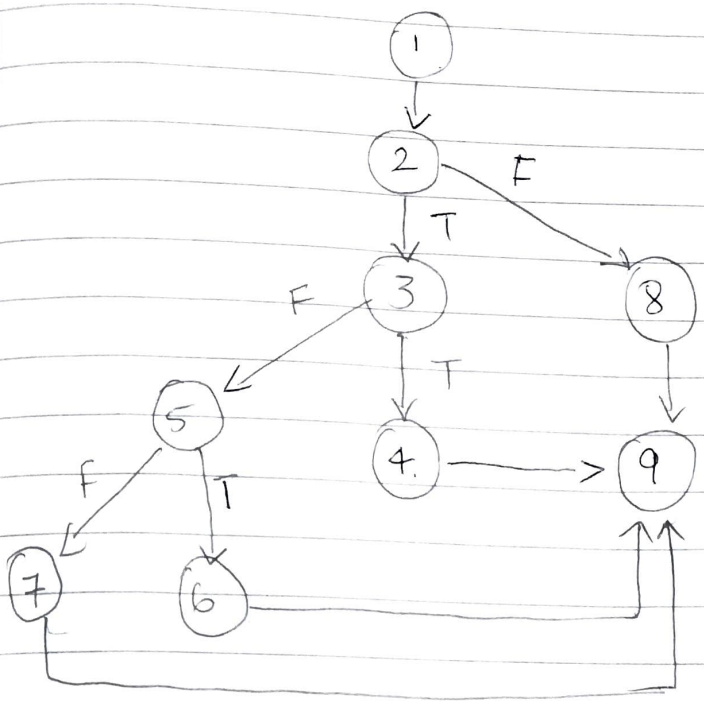
```
public class cyclomatic complexity demo {
    public static void main (String args[]) {
        int var1=10;
        int var2 = 9;
        int var3 = 8;
        int var4 = 7;
    if (var1==10) ]-(2)
        if (var2>var3)]-(3)
            {
                var2 = var3;]-(4)
            }
        else {
                if (var3>var4)]-(5)
                    {
                        var3 = var4; ]-(6)
                    }
                else{
                        var4 = var1; ]-(7)
                    }
            }
    else {
            var1 = var4; ]-(8)
        }
System.out.println("Printing var1, var2, var3, var4");]
    }
}
```

(1) initialization.

(9)

2018/CSE062
Saif

→ Control Flow Graph :-



→ Cyclometric Complexity:

~~Nodes~~ = Node Predicates => Node 2, 3, 5

∴ Predicates = 3.

Cyclometric complexity = No. of Predicates + 1

= 3 + 1

Cyclometric complexity = 4

→ Paths are:

1. 1 - 2 - 8 - 9
2. 1 - 2 - 3 - 4 - 9
3. 1 - 2 - 3 - 5 - 6 - 9
4. 1 - 2 - 3 - 5 - 7 - 9

* According to values for all 4 variables the test cases are :-

1 - 2 - 3 - 4 - 9 [This will be path for given values].

So expected output will be

Printing values for var1, var2, var3, var4 : 10, 8, 8, 7