

Test

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June 2015

Overview

1 Q 2.7: Basis path / Cyclomatic complexity testing

Cyclomatic Complexity

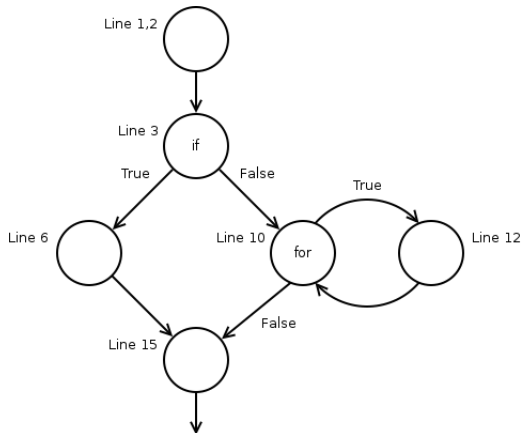
Measures the complexity of a piece of code.

$$CC = E - N + 2P$$

Example Code

```
1  int Factorial(int n) {
2      int f = 1;
3      if (n < 0)
4          {
5              // -1 indicates an error
6              f = -1;
7          }
8      else
9          {
10         for (int i = 1; i < n; i++)
11             {
12                 f *= i;
13             }
14         }
15     return f;
16 }
```

Example Graph



Test Cases

Cyclomatic Complexity $7 - 6 + 2 = 3$.

Test case 1: $n = 0$

Test case 2: $n = 2$

The End

“Testing shows the presence, not the absence of bugs.”
— *Edsger W. Dijkstra*