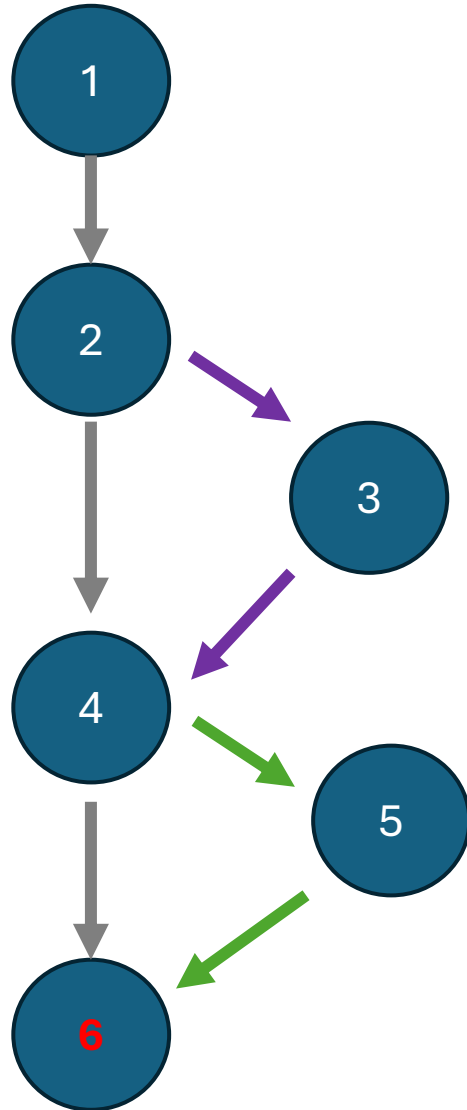


# Cyclomatic Complexity

## Control Flow Graph



Nodes:  
**N=6**

Edges:  
**E = 3 + 2 + 2 = 7**

Connected  
Components

**P = 1**  
(node 6)

## Code

```
public static string IntroducePerson(string name, int age)
{
    #Node 1
    var response = $"Hi! My name is {name} and I'm {age}
    years old.";
    #Node 2
    if (age >= 18)
        #Node 3
        response += " I'm an adult.";
    #Node 4
    if (name.Length > 7)
        #Node 5
        response += " I have a long name.";
    #Node 6
    return response;
}
```

## Cyclomatic Complexity – McCabe's Formula

$$\begin{aligned} M &= E - N + 2P \\ &= 7 - 6 + 2 \times 1 \\ &= 3 \end{aligned}$$