Learn to Test Your Code

How do you know that your program works?

There's only one correct answer: test it!*

Brooks' Rule of Thumb
- 1/3 planning and design
- 1/6 writing the program
- **1/2 testing**

Just because your program compiles
does not mean that your program works!

**Becoming a good tester will take years.
Don't worry if it seems tough.*

A Starting Point: Every Statement Must be Executed

How can we test our program?

Let's start with something simple.

Let's say that we have **a statement that is never executed by tests**.

Does the statement work correctly?

How can we know? We have no tests!

So, no, it **does not work correctly**.

At a minimum, we **must execute every statement** (called **full code coverage**).