**Key Terms**

* **Testing** - Validating code behavior through automated scripts to check for correctness and catch issues.
* **Unit Test** - Testing isolated chunks of code like functions or classes.
* **Test Function** - An isolated test wrapped in a Python function.
* **Test Class** - A class that contains related test methods.
* **Assertion** - Boolean checks in test code to verify values match expectations.
* **Fixture** - Shared test data or state managed by the testing framework.

def test\_multiply(self):

    calculator = Calculator()

    assert calculator.multiply(3, 5) == 15

# Test function using pytest fixture for temp data

import pytest

@pytest.fixture

def input\_value():

    return 10

def test\_stuff(input\_value):

    assert input\_value == 10

        calculator = Calculator()

        assert calculator.add(2, 2) == 4

class TestCalculator:

    def test\_add(self):

    assert "hello".capitalize() == "Hello"

# Class with two related test methods

# Using assertions in a test function

def test\_capitalize():