

CS 362 In-class Activity 3

I decided to try using pytest as an alternative to the unittest python library. I had to change the syntax of all my test cases, because pytest uses regular python assert statements instead of custom functions like the unittest module, but other than that the tests stayed mostly the same. I also had to change some of the places where I was checking for exceptions so that they correctly recognized the exceptions, as well as the places where I wanted to check if something was approximately equal, where I had to use pytest's approx function. Here is the pytest output:

```
===== test session starts =====
platform darwin -- Python 3.9.0, pytest-6.2.3, py-1.10.0, pluggy-0.13.1 -- /Users/allenbenjamin/.pyenv/versions/3.9.0/bin/python3
cachedir: .pytest_cache
rootdir: /Users/allenbenjamin/Data/OSU/2021_2 Spring/CS 362/in-class-activity-3/testing
collected 13 items

test_calculator_pytest.py::test_add_good PASSED [ 7%]
test_calculator_pytest.py::test_add_fail FAILED [ 15%]
test_calculator_pytest.py::test_add_exceptions PASSED [ 23%]
test_calculator_pytest.py::test_subtract_good PASSED [ 30%]
test_calculator_pytest.py::test_subtract_fail FAILED [ 38%]
test_calculator_pytest.py::test_subtract_exceptions PASSED [ 46%]
test_calculator_pytest.py::test_multiply_good PASSED [ 53%]
test_calculator_pytest.py::test_multiply_fail FAILED [ 61%]
test_calculator_pytest.py::test_multiply_exceptions PASSED [ 69%]
test_calculator_pytest.py::test_divide_good PASSED [ 76%]
test_calculator_pytest.py::test_divide_fail FAILED [ 84%]
test_calculator_pytest.py::test_divide_exceptions PASSED [ 92%]
test_calculator_pytest.py::test_divide_by_zero PASSED [100%]

===== FAILURES =====
test_add_fail

def test_add_fail():
> assert calculator.add(3, 4) == -1235365
E assert 7 == -1235365
E      +7
E      --1235365
test_calculator_pytest.py:10: AssertionError
test_subtract_fail

def test_subtract_fail():
> assert calculator.subtract(3, 4) == -1235365
E assert -1 == -1235365
E      +-1
E      --1235365
test_calculator_pytest.py:22: AssertionError
test_multiply_fail

def test_multiply_fail():
> assert calculator.multiply(3, 4) == -1235365
E assert 12 == -1235365
E      +12
E      --1235365
test_calculator_pytest.py:34: AssertionError
test_divide_fail

def test_divide_fail():
> assert calculator.divide(3, 4) == -1235365
E assert 0.75 == -1235365
E      +0.75
E      --1235365
test_calculator_pytest.py:46: AssertionError
===== short test summary info =====
FAILED test_calculator_pytest.py::test_add_fail - assert 7 == -1235365
FAILED test_calculator_pytest.py::test_subtract_fail - assert -1 == -1235365
FAILED test_calculator_pytest.py::test_multiply_fail - assert 12 == -1235365
FAILED test_calculator_pytest.py::test_divide_fail - assert 0.75 == -1235365
===== 4 failed, 9 passed in 0.14s =====
```