ASSIGNMENT 6.2
on
Testing

Submitted by:

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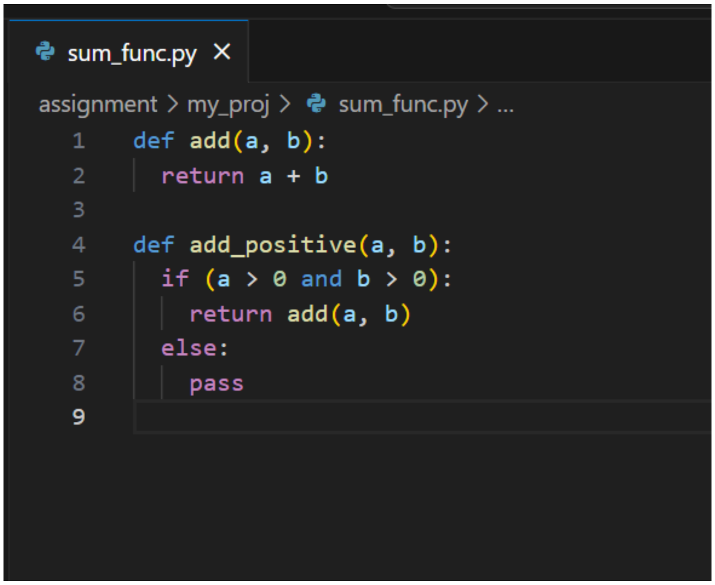
Given add functions



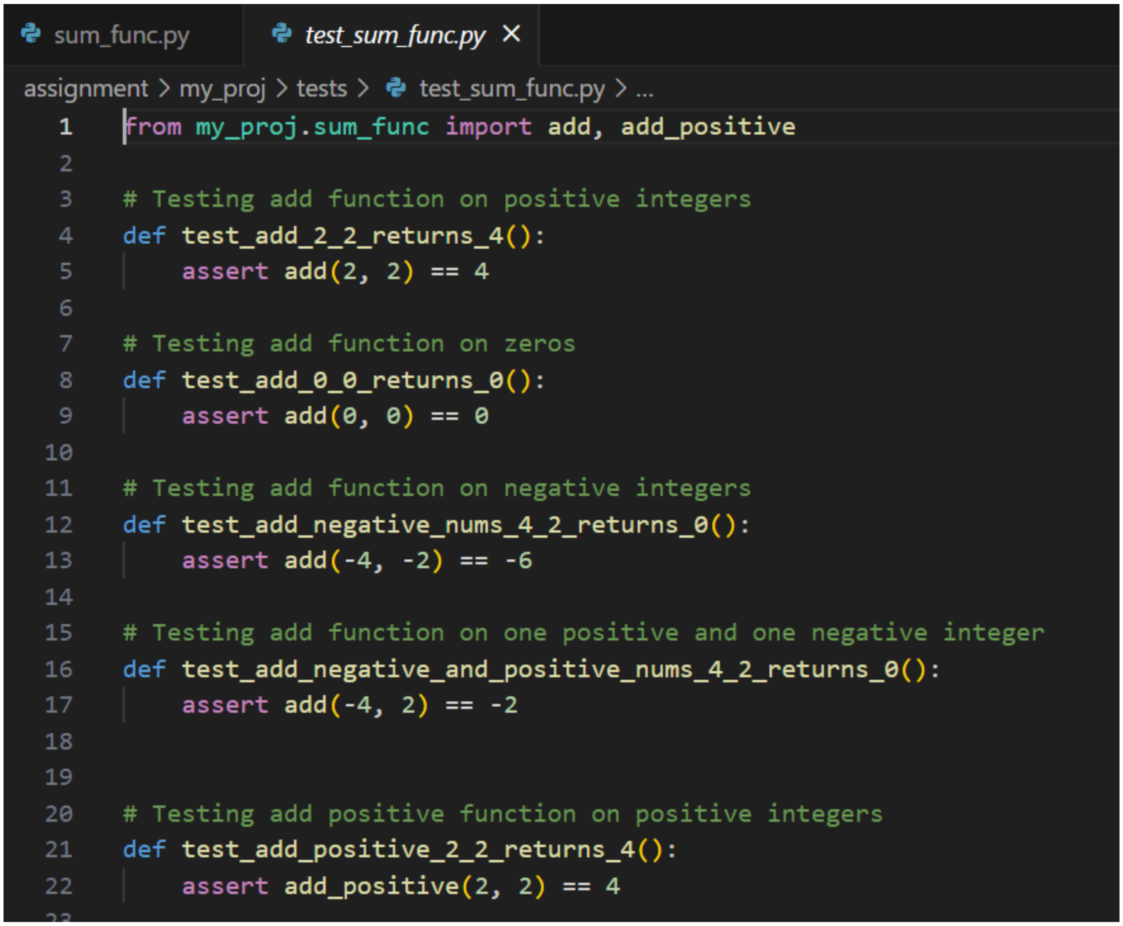
```python
def add(a, b):
    return a + b

def add_positive(a, b):
    if (a > 0 and b > 0):
        return add(a, b)
    else:
        pass
```

Tests implementation

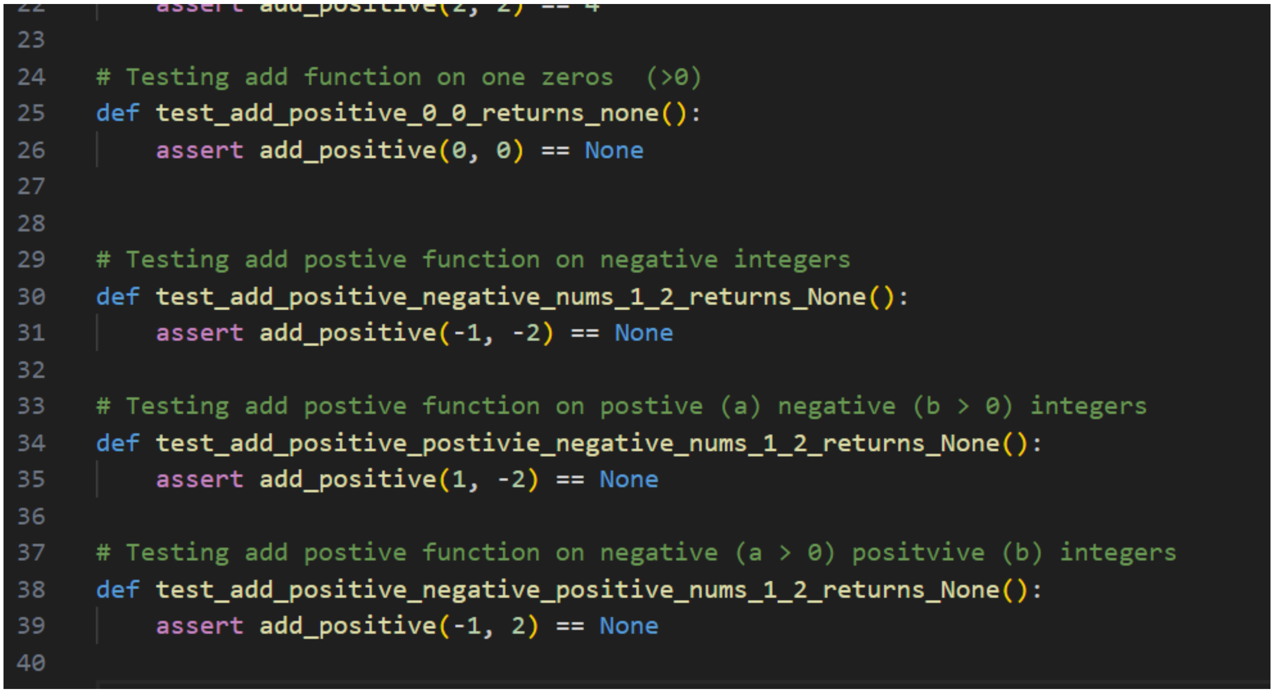
Tests are implemented in way to achieve 100% code coverage, given tests ensures

- ✓ Each statement in code is executed
- ✓ Conditions works properly which is tested by trying all the condition combinations.
- ✓ 100% code coverage by implementing branch testing, each function is evaluated as true as well as false.

Implementation code

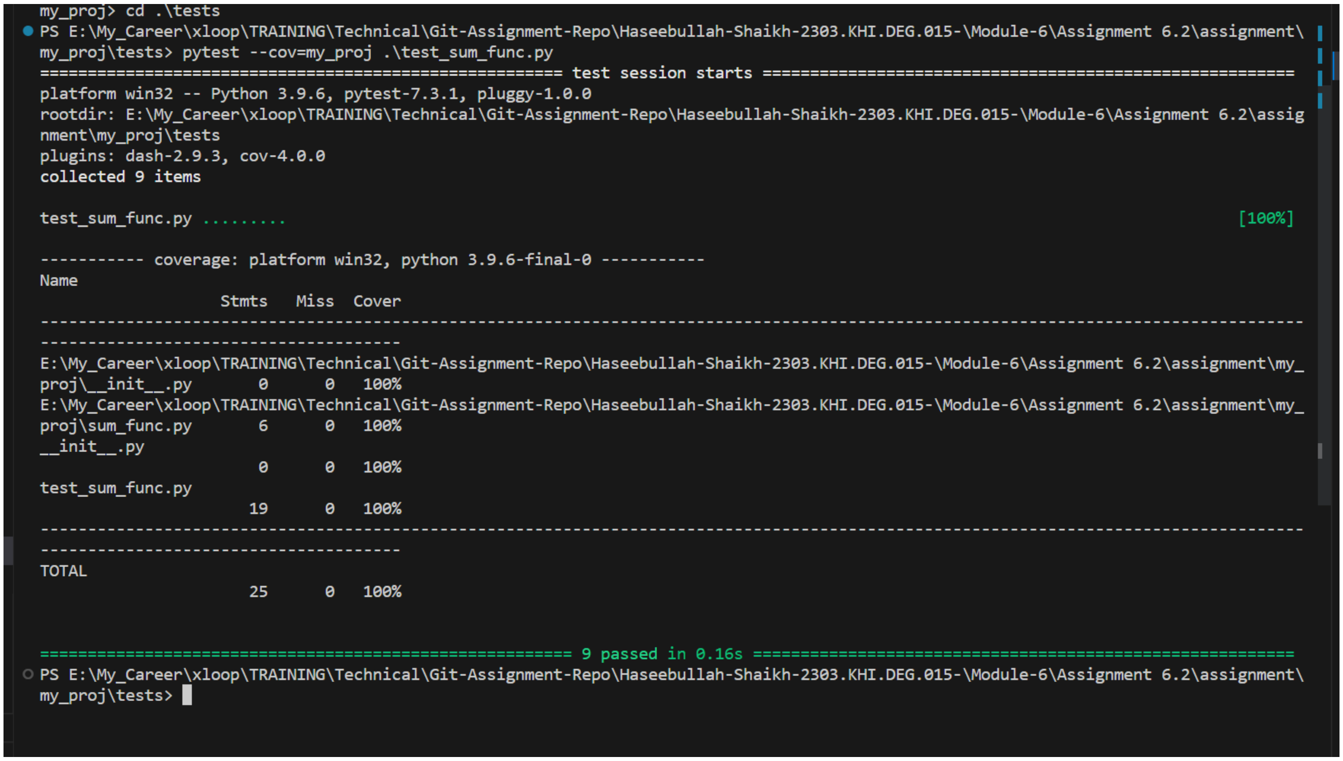


```python
from my_proj.sum_func import add, add_positive

# Testing add function on positive integers
def test_add_2_2_returns_4():
    assert add(2, 2) == 4

# Testing add function on zeros
def test_add_0_0_returns_0():
    assert add(0, 0) == 0

# Testing add function on negative integers
def test_add_negative_nums_4_2_returns_0():
    assert add(-4, -2) == -6

# Testing add function on one positive and one negative integer
def test_add_negative_and_positive_nums_4_2_returns_0():
    assert add(-4, 2) == -2


# Testing add positive function on positive integers
def test_add_positive_2_2_returns_4():
    assert add_positive(2, 2) == 4
```



```python

# Testing add function on one zeros  (>0)
def test_add_positive_0_0_returns_none():
    assert add_positive(0, 0) == None


# Testing add postive function on negative integers
def test_add_positive_negative_nums_1_2_returns_None():
    assert add_positive(-1, -2) == None

# Testing add postive function on postive (a) negative (b > 0) integers
def test_add_positive_postivie_negative_nums_1_2_returns_None():
    assert add_positive(1, -2) == None

# Testing add postive function on negative (a > 0) positvive (b) integers
def test_add_positive_negative_positive_nums_1_2_returns_None():
    assert add_positive(-1, 2) == None

```

Testing coverage results



```
my_proj> cd .\tests
PS E:\My_Career\xloop\TRAINING\Technical\Git-Assignment-Repo\Haseebullah-Shaikh-2303.KHI.DEG.015-\Module-6\Assignment 6.2\assignment\
my_proj\tests> pytest --cov=my_proj .\test_sum_func.py
======================================================= test session starts ========================================================
platform win32 -- Python 3.9.6, pytest-7.3.1, pluggy-1.0.0
rootdir: E:\My_Career\xloop\TRAINING\Technical\Git-Assignment-Repo\Haseebullah-Shaikh-2303.KHI.DEG.015-\Module-6\Assignment 6.2\assig
nment\my_proj\tests
plugins: dash-2.9.3, cov-4.0.0
collected 9 items

test_sum_func.py .........                                                                                                   [100%]

---------- coverage: platform win32, python 3.9.6-final-0 -----------
Name
                   Stmts   Miss  Cover
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E:\My_Career\xloop\TRAINING\Technical\Git-Assignment-Repo\Haseebullah-Shaikh-2303.KHI.DEG.015-\Module-6\Assignment 6.2\assignment\my_
proj\__init__.py       0      0   100%
E:\My_Career\xloop\TRAINING\Technical\Git-Assignment-Repo\Haseebullah-Shaikh-2303.KHI.DEG.015-\Module-6\Assignment 6.2\assignment\my_
proj\sum_func.py       6      0   100%
__init__.py
                       0      0   100%
test_sum_func.py
                      19      0   100%
-------------------------------------------------------------------------------------------------------------------------------------
--------------------------------------
TOTAL
                      25      0   100%


======================================================== 9 passed in 0.16s ========================================================
PS E:\My_Career\xloop\TRAINING\Technical\Git-Assignment-Repo\Haseebullah-Shaikh-2303.KHI.DEG.015-\Module-6\Assignment 6.2\assignment\
my_proj\tests> 
```

The End ☺