

## Documentation of Problem-2

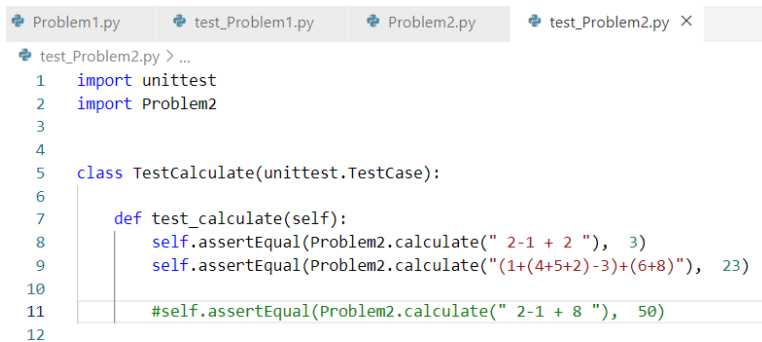
Instructions to execute the solve and test file of Problem-2 are same as Problem-1.

Two python files have been attached regarding this problem as well.

- I. Problem2.py : This file contains the Python solve of the problem.
- II. test\_Problem2.py : This file is for unit testing of the Python solve of Problem-2

Execution of “test\_Problem2.py “:

Test cases of this example –



```
test_Problem2.py > ...
1  import unittest
2  import Problem2
3
4
5  class TestCalculate(unittest.TestCase):
6
7      def test_calculate(self):
8          self.assertEqual(Problem2.calculate(" 2-1 + 2 "), 3)
9          self.assertEqual(Problem2.calculate("(1+(4+5+2)-3)+(6+8)"), 23)
10
11         #self.assertEqual(Problem2.calculate(" 2-1 + 8 "), 50)
12
```

After executing “test\_Problem2.py “ with appropriate test cases -

Try the new cross-platform PowerShell <https://aka.ms/powershell>

```
PS D:\Sept 21\Haajee Automobiles assesment solve> & 'C:\Users\
ms-python.python-2021.11.1422169775\pythonFiles\lib\python\debu
```

```
Enter your equation:"(1+(4+5+2)-3)+(6+8)"
```

```
23
```

```
.
```

```
-----
Ran 1 test in 0.001s
```

```
OK
```

```
-
```

Executing "test\_Problem2.py " with inappropriate test cases –

```
class TestCalculate(unittest.TestCase):  
  
    def test_calculate(self):  
        self.assertEqual(Problem2.calculate(" 2-1 + 2 "), 3)  
        self.assertEqual(Problem2.calculate("(1+(4+5+2)-3)+(6+8)"), 23)  
  
        self.assertEqual(Problem2.calculate(" 2-1 + 8 "), 50)
```

After execution –

```
PS D:\Sept 21\Haajee Automobiles assesment solve> & 'C:\Users\farha\AppData\Local\Programs\Python\Py  
21.11.1422169775\pythonFiles\lib\python\debugpy\launcher' '63004' '--' 'd:\Sept 21\Haajee Automobiles  
Enter your equation:" 2-1 + 2 "  
3  
F  
=====  
FAIL: test_calculate (__main__.TestCalculate)  
-----  
Traceback (most recent call last):  
  File "d:\Sept 21\Haajee Automobiles assesment solve\test_Problem2.py", line 11, in test_calculate  
    self.assertEqual(Problem2.calculate(" 2-1 + 8 "), 50)  
AssertionError: 9 != 50  
  
-----  
Ran 1 test in 0.001s  
  
FAILED (failures=1)
```