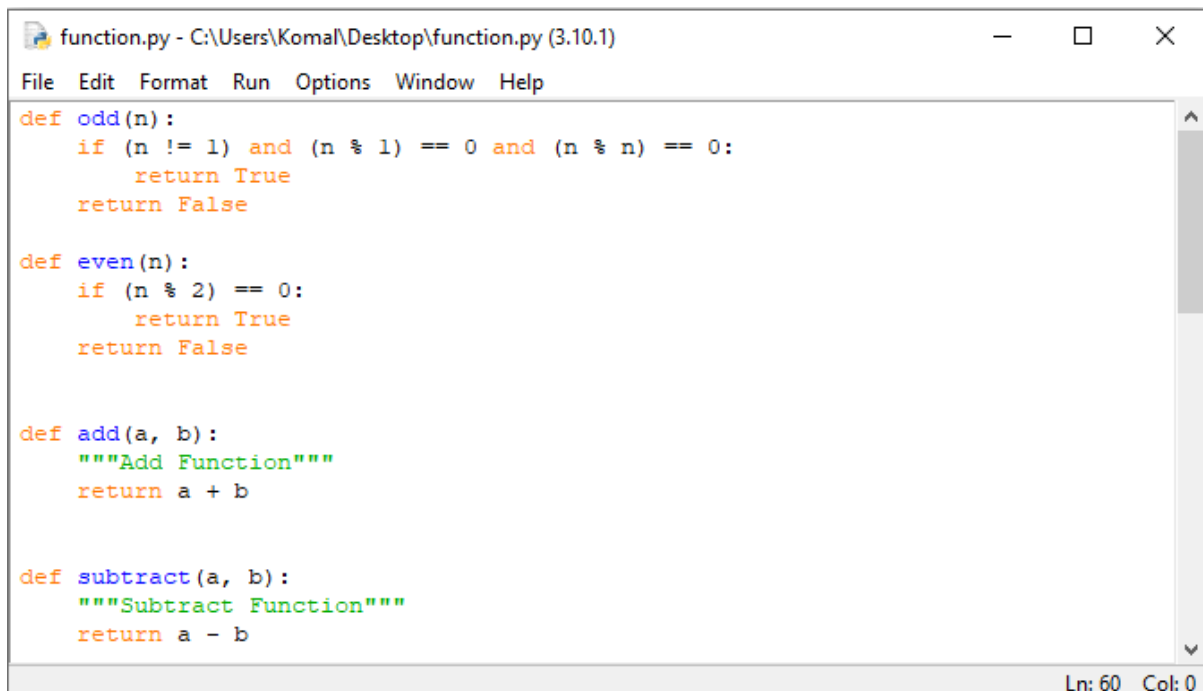


Report

DESCRIPTION:

- Write at least five automated test cases using any unit testing framework.
⇒ **Eight** automated unit tests implemented
- You also need to create a testing suite.
⇒ Test Suite Created
- All the test cases should be successfully executed individually and also under one test suite.
⇒ All tests being successfully executed individually and under one test suite
- You can use any programs / software system of your choice for testing e.g. Junit for Java code, PYunit for Python code, PHPUnit for PHP code, etc.
⇒ PYunit used

Screenshots of Testcases:



```
function.py - C:\Users\Komal\Desktop\function.py (3.10.1)
File Edit Format Run Options Window Help

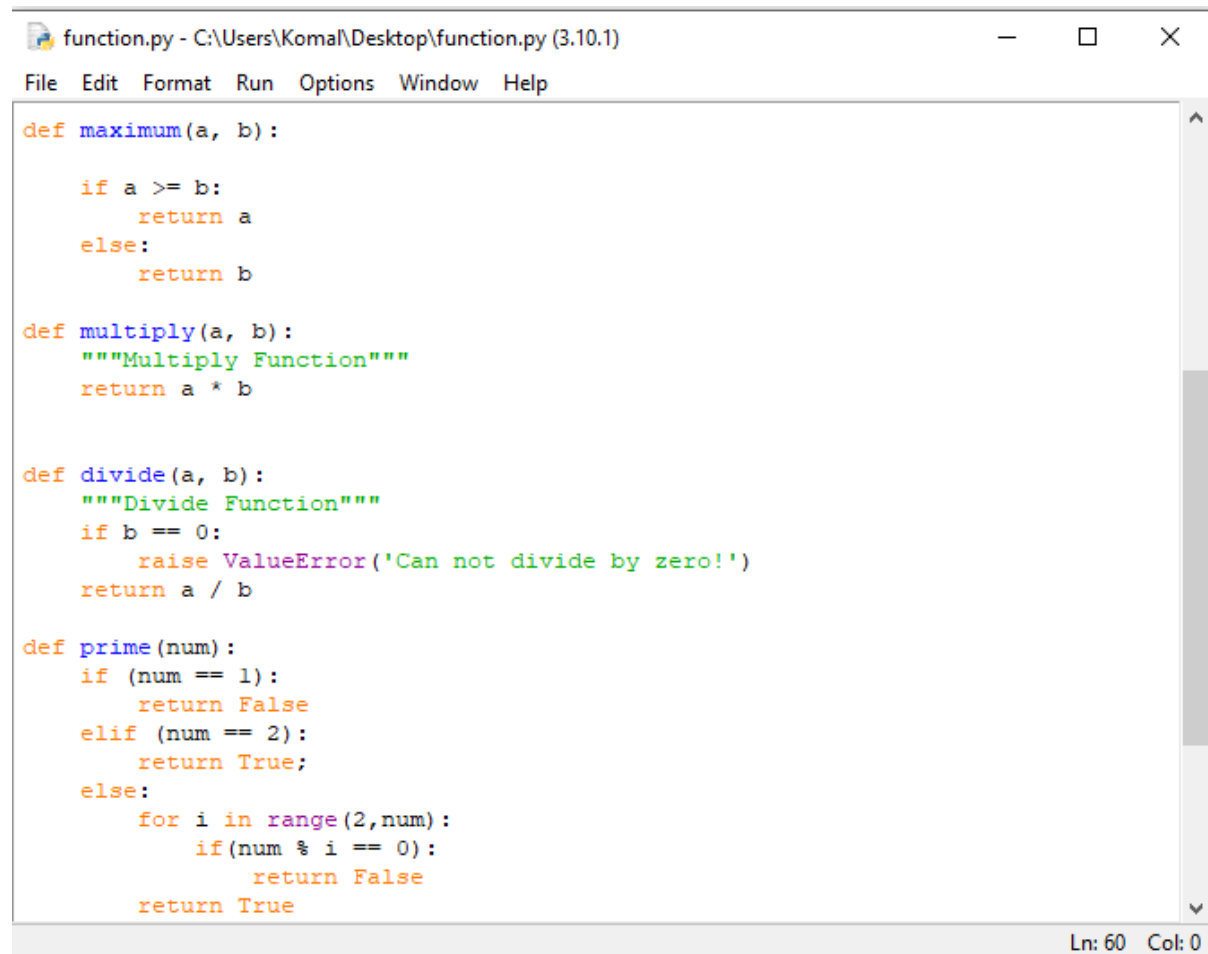
def odd(n):
    if (n != 1) and (n % 1) == 0 and (n % n) == 0:
        return True
    return False

def even(n):
    if (n % 2) == 0:
        return True
    return False

def add(a, b):
    """Add Function"""
    return a + b

def subtract(a, b):
    """Subtract Function"""
    return a - b

Ln: 60 Col: 0
```



```
function.py - C:\Users\Komal\Desktop\function.py (3.10.1)
File Edit Format Run Options Window Help

def maximum(a, b):
    if a >= b:
        return a
    else:
        return b

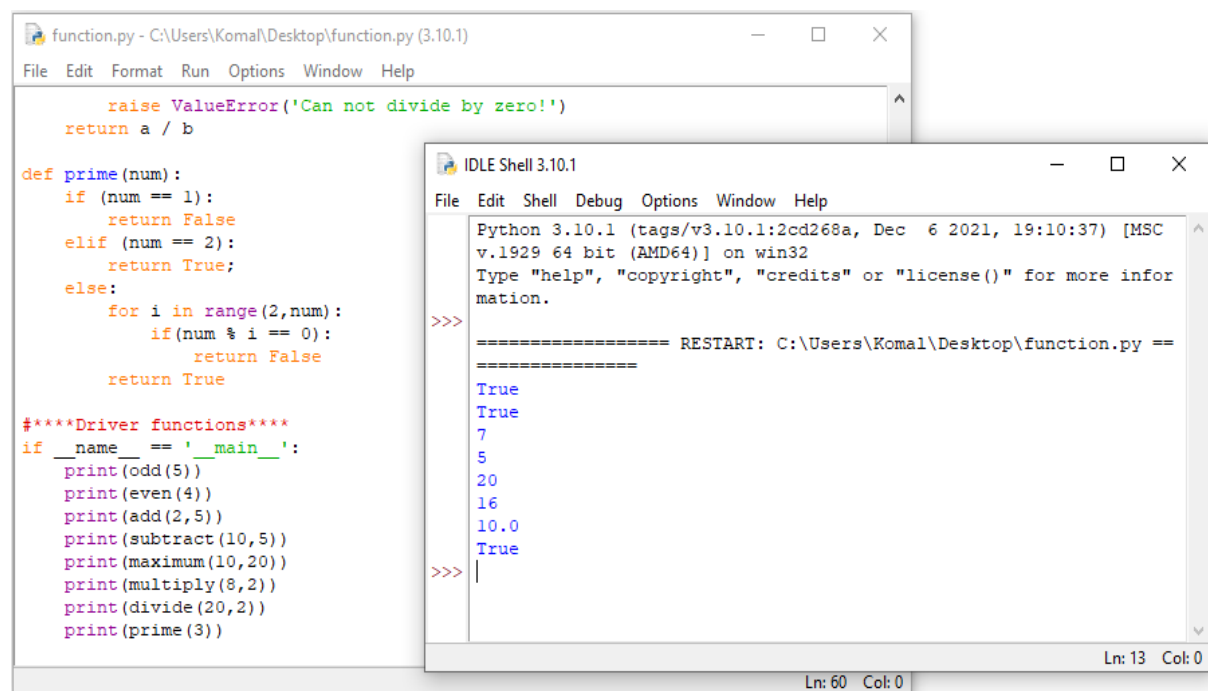
def multiply(a, b):
    """Multiply Function"""
    return a * b

def divide(a, b):
    """Divide Function"""
    if b == 0:
        raise ValueError('Can not divide by zero!')
    return a / b

def prime(num):
    if (num == 1):
        return False
    elif (num == 2):
        return True;
    else:
        for i in range(2,num):
            if(num % i == 0):
                return False
        return True
```

Ln: 60 Col: 0

Outcome/Result of the Testcases:



```
function.py - C:\Users\Komal\Desktop\function.py (3.10.1)
File Edit Format Run Options Window Help

    raise ValueError('Can not divide by zero!')
    return a / b

def prime(num):
    if (num == 1):
        return False
    elif (num == 2):
        return True;
    else:
        for i in range(2,num):
            if(num % i == 0):
                return False
        return True

#****Driver functions****
if __name__ == '__main__':
    print(odd(5))
    print(even(4))
    print(add(2,5))
    print(subtract(10,5))
    print(maximum(10,20))
    print(multiply(8,2))
    print(divide(20,2))
    print(prime(3))
```

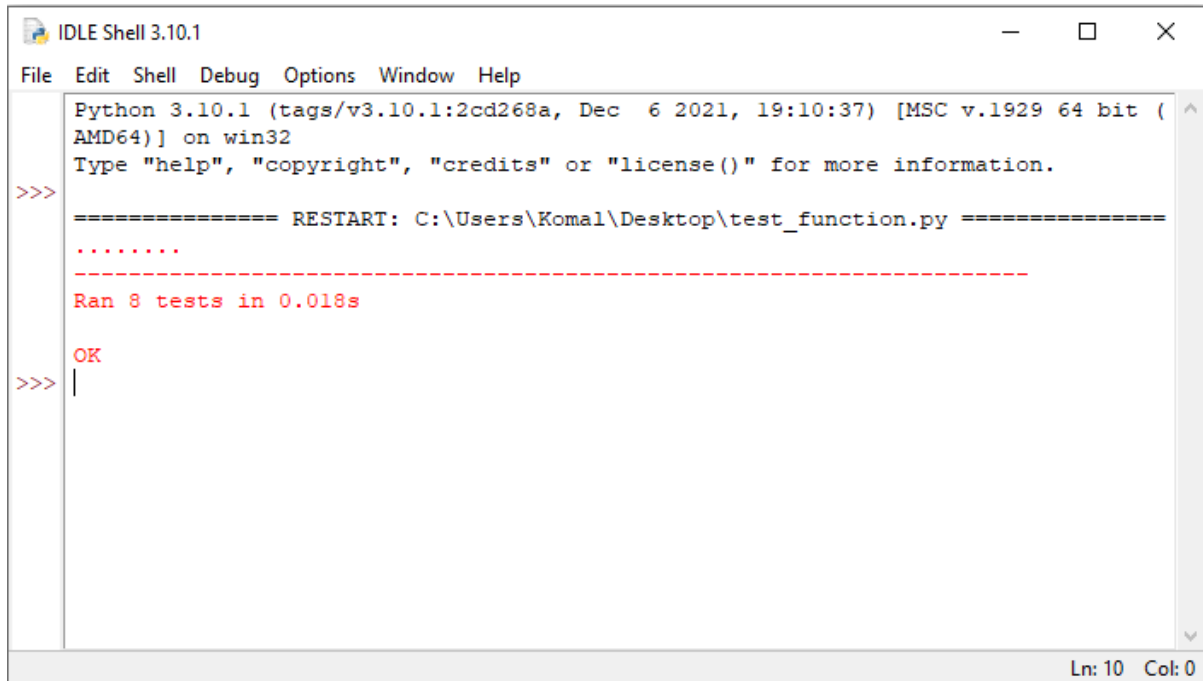
```
IDLE Shell 3.10.1
File Edit Shell Debug Options Window Help

Python 3.10.1 (tags/v3.10.1:2cd268a, Dec 6 2021, 19:10:37) [MSC
v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more infor
mation.
>>>
===== RESTART: C:\Users\Komal\Desktop\function.py ==
=====
True
True
7
5
20
16
10.0
True
>>> |
```

Ln: 60 Col: 0

Ln: 13 Col: 0

Running the Testcases successfully to show pass/fail:



The screenshot shows the IDLE Shell 3.10.1 window. The title bar reads "IDLE Shell 3.10.1". The menu bar includes "File", "Edit", "Shell", "Debug", "Options", "Window", and "Help". The shell area displays the following text:

```
Python 3.10.1 (tags/v3.10.1:2cd268a, Dec 6 2021, 19:10:37) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Komal\Desktop\test_function.py =====
.....
-----
Ran 8 tests in 0.018s
OK
>>> |
```

The status bar at the bottom right indicates "Ln: 10 Col: 0".