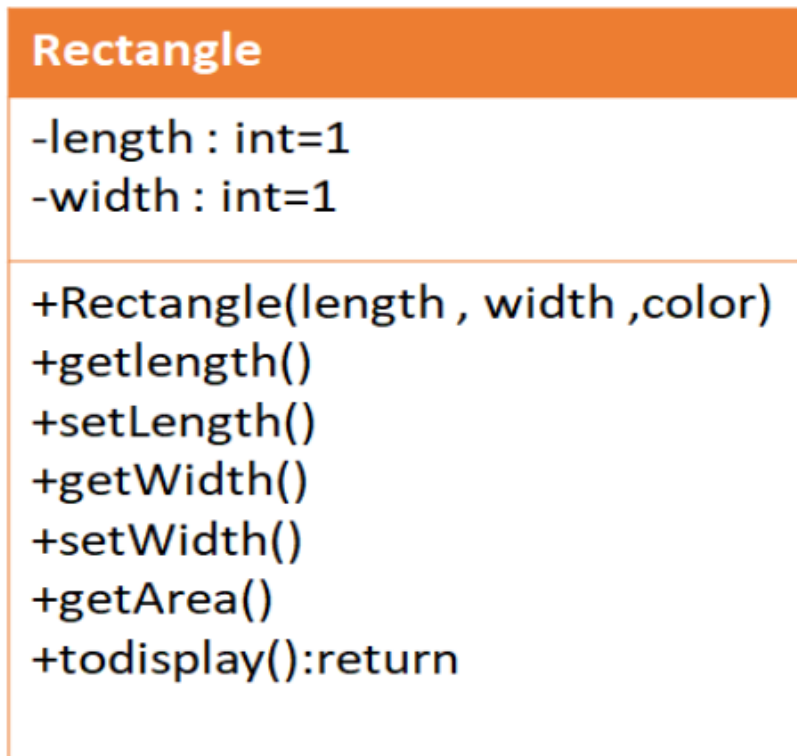


i) Develop a python program for given class diagram ,



ii) Write a TestCase class for the below class diagram,

File name:mt

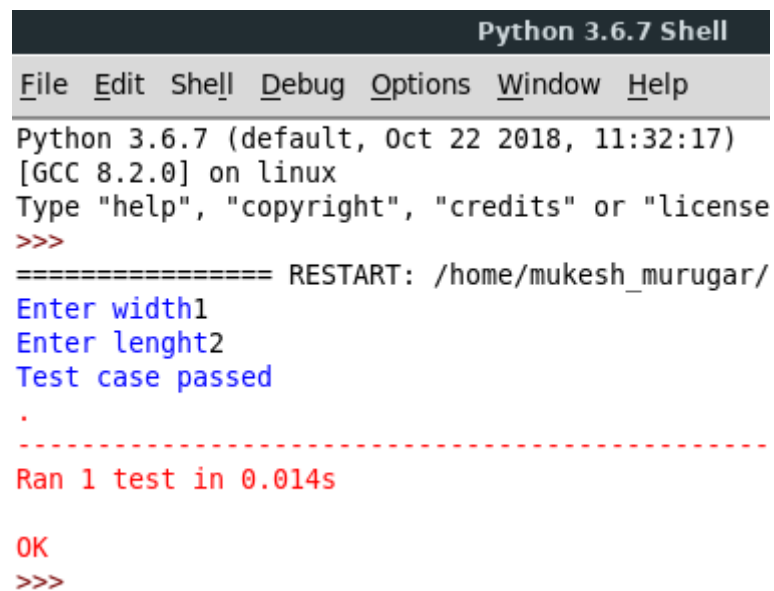
```
li=[]
class Shapes:
    def __init__(self,wi,leng):
        self.width=wi
        self.lenght=leng
    def getlen(self):
        return self.lenght
    def getwidth(self):
        return self.width
    def cal(self):
        self.area=self.width*self.lenght
    def getarea(self):
        self.area=str(self.area)
        return self.area
    def disp(self):
        li.append(self.getarea())
x=int(input("Enter width"))
y=int(input("Enter lenght"))
obj=Shapes(x,y)
obj.cal()
```

```
obj.disp()
```

File name :mt1.py

```
import unittest
import mt
class testcases1(unittest.TestCase):
    def test(self):
        res=mt.li
        self.assertEqual(res,['2'])
        print("Test case passed")
if __name__=="__main__":
    unittest.main()
```

Output:



```
Python 3.6.7 Shell
File Edit Shell Debug Options Window Help
Python 3.6.7 (default, Oct 22 2018, 11:32:17)
[GCC 8.2.0] on linux
Type "help", "copyright", "credits" or "license"
>>>
===== RESTART: /home/mukesh_murugar/
Enter width1
Enter lenght2
Test case passed
.
-----
Ran 1 test in 0.014s

OK
>>>
```