Day 4 python Assignment

1-The program takes a command line argument, this argument is the name of a text file.the program reads all the text and split them and calculate the 20 most used words in the file and then write them to a file called popular_words.txt

In [9]:
```
from collections import Counter

#opens the file. the with statement here will automatically close it afterward
s.
with open("mockingjay.txt") as input_file:
    #build a counter from each word in the file
    count = Counter(word for line in input_file
                         for word in line.split())

print(count.most_common(10))
```

```
[('the', 1529), ('I', 861), ('to', 842), ('of', 643), ('a', 609), ('and', 53
7), ('in', 413), ('my', 371), ('that', 233), ('on', 220)]
```

In [15]:
```
with open('result.txt', 'w') as f:
    f.write(str(count.most_common(10)))
```

2-Create a Vehicle class without any variables and methods

In [ ]:
```
class Person:
  def __init__(self, name, age):
    self.name = name
    self.age = age

p1 = Person("John", 36)

print(p1.name)
print(p1.age)
```

In [17]:
```
class Vehicle:
    pass
```

3- Create a Vehicle class with max_speed and mileage instance attributes

In [18]:
```
class Vehicle:
    def __init__(self,max_speed,mileage):
        self.max_speed = max_speed
        self.mileage   = mileage
```

4- Write a Python class which has two methods: get_String and print_String. get_String accept a string from the user and print_String print the string in upper case

In [20]:
```
class String_Processor():

    def __init__(self):
        self.z = ""
    def get_String(self):
        self.z = input("Enter your text: ")
        print(self.z)
    def print_String(self):
        print(self.z.upper())
```

In [23]:
```
str_1 = String_Processor()

str_1.get_String()
```

```
Enter your text: mostafa
mostafa
```

In [24]:
```
str_1.print_String()
```

```
MOSTAFA
```

5- create calculator module has A- Add method B- multiple method C- subtract method D - Divide method

In [28]:
```
import Calc
```

In [29]:
```
Calc.add(2,3)
```

Out[29]: 5

In [30]:
```
Calc.sub(3,2)
```

Out[30]: 1

In [32]:
```
Calc.multi(3,2)
```

Out[32]: 6

In [33]:
```
Calc.divide(10,2)
```

Out[33]: 5.0