LAB:10

QUESTION:1

Write a function stats() that takes one input argument: the name of a text file. The
;function should print, on the screen, the number of lines, words, and characters in the file
.your function should open the file only once
stats('example.txt') >>>
line count: 3 word count: 20
character count: 98

INPUT:

```
def stats():
    name=input("enter your name: ")
    f=open(name)
    a=f.read()
    print(a)
    characters=len(a)
    words=len(a.split())
    lines=len(a.splitlines())
    return characters,words,lines
a1,a2,a3=stats()
print("THE NUMBERS OF CHARACTERS ,WORDS AND LINES ARE:
{0},{1},{2}".format(a1,a2,a3),"RESPECTIVELY")
```

OUTPUT:

enter your name: D:/ff.txt
Assalam-o-alaikum,myself syeda khadeeja, I am 19 years old currently studing in NED university in software department in first year. my aim is to become a good developer and to create ease for the upcoming students. our teachers are cooperative and they are helping us in shaping our future.
THE NUMBERS OF CHARACTERS ,WORDS AND LINES ARE: 293,48,3 RESPECTIVELY
Process finished with exit code 0

QUESTION:02

.Implement function distribution() that takes as input the name of a file (as a string). This one-line file will contain letter grades separated by blanks.Your function should
.print the distribution of grades, as shown
distribution('grades.txt') >>>
students got A 6 , -students got A 2 , +students got B 3 ,- students got B 2 , ,students got C 4, -student got C 1 , students got F 2

INPUT:

```
def distribution():
    name=input("enter your name: ")
    f=open(name)
    a=f.read()
    print(a)
    b=a.count("+A")
    c=a.count("-A")
    d=a.count("+B")
    e=a.count("-B")
    f=a.count("+C")
    g=a.count("-C")
    h=a.count("+F")
    return b,c,d,e,f,g,h
b,c,d,e,f,g,h=distribution()
print("STUDENTS GOT A+: {0},STUDENTS GOT -A: {1}, STUDENTS GOT +B: {2}, STUDENTS GOT -B:
{3},\nSTUDENTS GOT +C: {4},STUDENTS GOT -C: {5},STUDENTS GOT +F: {6}".format(b,c,d,e,f,g,h))
```

OUTPUT :

enter your name: d:/grades.txt
+A +A +A +A +A +A +A
-A -A -A
+B +B +B +B +B
-B -B -B -B -B
+C +C +C +C
-C -C
+F
STUDENTS GOT A+: 7,STUDENTS GOT -A: 3, STUDENTS GOT +B: 6, STUDENTS GOT -B: 5,
STUDENTS GOT +C: 4,STUDENTS GOT -C: 2,STUDENTS GOT +F: 1
Process finished with exit code 0

QUESTION:03

. Implement function duplicate () that takes as input the name (a string) of a file in the current directory and returns True if the file contain duplicate words and False otherwise
duplicate('Duplicates.txt') >>> True
duplicate('noDuplicates.txt') >>>
False

INPUT:

```
def distribution():
   name=input("enter name of file: ")
   f=open(name)
   a=f.read()
   print(a)
   l1=list(a.split())
   s1=set(a.split())
   print(l1)
   print(s1)
   if len(l1)>len(s1):
      print(True)
   else:
      print(False)
distribution()
```

OUTPUT:

enter name of file: d:/repeatation.txt
good morning ali assalamoalaikum best of luck
good morning soha assalamoalaikum best of luck
['good', 'morning', 'ali', 'assalamoalaikum', 'best', 'of', 'luck', 'good', 'morning', 'soha', 'assalamoalaikum', 'best', 'of', 'luck']
{'assalamoalaikum', 'of', 'morning', 'best', 'soha', 'ali', 'luck', 'good'}
True
Process finished with exit code 0

QUESTION:04

The function abc() takes the name of a file (a string) as input. The function should open the file, read it, and then write it into file abc.txt with this modification: Every occurrence of a four-letter word in the file should be replaced with string 'xxxx abc('example.txt') >>>
Note that this function produces no output, but it does create file abc.txt in the current folder

INPUT:

```
def abc():
    name=str(input('enter name of file to open: '))
```

```
    f=open(name)
    k=f.read()
    print(k)
    w="""""""
    for i in k:
        if len(i)==4:
            i="xxxx"
        w+=i+""
        q=open("abc.txt","w")
        q.write(w)

abc()
```

OUTPUT:

enter name of file to open: d:/newfile.txt
helloeveryonexxxxmorningtodaywexxxxdiscussthexxxxofpakistanineliminatingterrorismandmakingxxxxworldapeaceful place.soxxxxstartxxxxintroduction.

Process finished with exit code 0