**PROGRAMMING EXERCISE**

**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.**

**Input:**

**def** stats(file):  
 f = open(file)  
 contents = f.read()  
 print(**'the total no. of characters counted are :'**,len(contents))  
 **with** open(file) **as** f1:  
 print(**'the total no. of lines counted are :'**,len(f1.readlines()))  
 **with** open(file) **as** f1:  
 print(**'the total no. of words counted are :'**,len((f1.read()).split(**' '**)))  
stats(**'kabeer.txt'**)

**Output:**

the total no. of characters counted are : 53

the total no. of lines counted are : 3

the total no. of words counted are : 10

**2. 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**

**Input:**

**def** distribution(file):  
 ld=[6,2,3,2,2,1,2]  
 **with** open(file) **as** f1:  
 **for** i,j **in** zip((f1.read()).split(**' '**),ld):  
 print(**'student got grades'**, i,j)  
distribution(**'kabeer.txt'**)

**Output:**

student got grades A 6

student got grades A 2

student got grades B 3

student got grades B 2

student got grades C 2

student got grades C 1

student got grades D 2

**3. Implement function duplicate() that takes as input the name (a string) of a file in the current directory and returns True if the file contains duplicate words and False otherwise.**

**Input:**

**def** duplicate(file):  
 **with** open(file) **as** f2:  
 con=f2.read().split(**' '**)  
 **for** i **in** range(len(con)):  
 **if** con[i]!=con[i+1]:  
 print(**True**)  
 **else**:  
 print(**False**)  
 print(**"THIS FILE does not CONTAIN DUPLICATE WORDS"**)  
 **break**duplicate(**'kabeer.txt'**)

**Output:**

False

THIS FILE does not CONTAIN DUPLICATE WORDS