1)Write a program, which initializes a string variable to the content "Time is a great teacher but unfortunately it kills all its pupils. Berlioz" and outputs the string to the disk file OUT.TXT

Code:

content = "Time is a great teacher but unfortunately it kills all its pupils. Berlioz"

with open("out.txt",mode='w') as f1:

   f1.write(content)

Output:

out.txt

Time is a great teacher but unfortunately it kills all its pupils. Berlioz

2)Write a user-defined function to read the content from a text file OUT.TXT, count and display the number of alphabets present in it.(exclude white spaces and special char)

Code:

content = "Time is a great teacher but unfortunately it kills all its pupils. Berlioz"

with open("out.txt",mode='w') as f1:

   f1.write(content)

def modify():

   with open("out.txt",mode="r") as f2:

       data = f2.read()

       count =0

       for i in data:

           if i.isalpha()==True:

               count+=1

print(i,end= ‘ ’)

       print("Count = ",count)

modify()

Output:

F:\PycharmProjects\python\venv\Scripts\python.exe F:/PycharmProjects/python/filestask.py

T i m e i s a g r e a t t e a c h e r b u t u n f o r t u n a t e l y i t k i l l s a l l i t s p u p i l s B e r l i o z Count =  61

Process finished with exit code 0

3)Write a function to count the number of blank present in a text file named "OUT.TXT"

Code:

content = "Time is a great teacher but unfortunately it kills all its pupils. Berlioz"

with open("out.txt",mode='w') as f1:

   f1.write(content)

def modify():

   with open("out.txt",mode="r") as f2:

       data = f2.read()

       count =0

       for i in data:

           if i== " ":

               count+=1

       print("Count of blank spaces = ",count)

modify()

Output:

F:\PycharmProjects\python\venv\Scripts\python.exe F:/PycharmProjects/python/filestask.py

Count of blank spaces =  12

Process finished with exit code 0

4)Write a function to count number of words in a text file named "OUT.TXT"

Code:

content = "Time is a great teacher but unfortunately it kills all its pupils. Berlioz"

with open("out.txt",mode='w') as f1:

   f1.write(content)

def modify():

   with open("out.txt",mode="r") as f2:

       data = f2.read()

       words = data.split()

       print("No. of words in file:",len(words))

modify()

Output:

F:\PycharmProjects\python\venv\Scripts\python.exe F:/PycharmProjects/python/filestask.py

No. of words in file: 13

Process finished with exit code 0

5) Write a function to print the count no. of sentences in a text file STORY.TXT.

for example, if the content of the file STORY.TXT is

There was a monkey in the zoo. The monkey was very naughty.

Then the output of the program should be 2

Code:

content = "There was a monkey in the zoo. The monkey was very naughty."

with open("story.txt",mode='w') as f1:

   f1.write(content)

def modify():

   with open("story.txt",mode="r") as f2:

       data = f2.read()

       sentences = data.count('.')

       print("No. of sentences in file:",sentences)

modify()

Output:

F:\PycharmProjects\python\venv\Scripts\python.exe F:/PycharmProjects/python/filestask.py

No. of sentences in file: 2

Process finished with exit code 0

6) Write a function to count and display the number of lines not starting with alphabet 'A' present in a text file "STORY.TXT".

Example:

If the file "STORY.TXT" contains the following lines,

The rose is red.

A girl is playing there.

There is a playground.

An aeroplane is in the sky.

Numbers are not allowed in the password.

The function should display the output as 3

Code:

content = "The rose is red.\nA girl is playing there.\nThere is a playground.\nAn aeroplane is in the sky.\nNumbers are not allowed in the password."

with open("story.txt",mode='w') as f1:

   f1.write(content)

def modify():

   with open("story.txt",mode="r") as f2:

       data = f2.read()

       count=0

       k =data.split('\n')

       for l in range(len(k)):

           if k[l][0]=='A':

               pass

           else:

               print(k[l])

               count+=1

       print("=>Count of sentences not starting with A:",count)

modify()

Output:

F:\PycharmProjects\python\venv\Scripts\python.exe F:/PycharmProjects/python/filestask.py

The rose is red.

There is a playground.

Numbers are not allowed in the password.

=>Count of sentences not starting with A: 3

Process finished with exit code 0

7) Assuming that a text file named FIRST.TXT contains some text written into it, write a function named copyupper(), that reads the file FIRST.TXT and creates a new file named SECOND.TXT contains all words from the file FIRST.TXT in uppercase.

Code:

content = "hello this is the content of first file"

with open("first.txt",mode='w') as f1:

   f1.write(content)

def copyupper():

   with open("first.txt",mode="r") as f2:

       with open("second.txt",mode='w') as f3:

           data = f2.read()

           f3.write(data.upper())

copyupper()

Output:

second.txt

HELLO THIS IS THE CONTENT OF FIRST FILE

8) Assuming that a text file named FIRST.TXT contains some text written into it, write a function named vowelwords(), that reads the file FIRST.TXT and creates a new file named SECOND.TXT, to contain only those words from the file FIRST.TXT which start with a lowercase vowel (i.e., with 'a', 'e', 'i', 'o', 'u').

For example, if the file FIRST.TXT contains

Carry umbrella and overcoat when it rains

Then the file SECOND.TXT shall contain

umbrella and overcoat it solution

Code:

content = "Carry umbrella and overcoat when it rains"

with open("first.txt",mode='w') as f1:

   f1.write(content)

def vowelwords():

   with open("first.txt",mode="r") as f2:

       with open("second.txt",mode='w') as f3:

           data = f2.read()

           k = data.split()

           p ='aeiou’'

           for i in range(len(k)):

               if k[i][0] in p:

                   f3.write(f'{k[i]} ')

vowelwords()

Output:

second.txt

umbrella and overcoat it