

## ANSWERS TO PRACTICE QUESTIONS – TEXT FILES

```
1 def count():
    u=l=d=sp=0
    fin=open("string.txt")
    s=fin.read(1)
    while s:
        if s.isupper():
            u+=1
        elif s.islower():
            l+=1
        elif s.isdigit():
            d+=1
        elif s!='\n':
            sp+=1
        s=fin.read(1)
    print("Number of upper case",u)
    print("Number of lower case",l)
    print("Number of digits",d)
    print("Number of special characters",sp)
```

read() also reads newline character \n

```
2 def count():
    v=c=0
    fin=open("string.txt")
    s=fin.read(1)
    while s:
        if s.isalpha():
            if s.upper() in "AEIOU":
                v+=1
            else:
                c+=1
        s=fin.read(1)
    print("Number of vowels",v)
    print("Number of consonants",c)
```

We need to check for isalpha() because consonants are alphabets which are not

```
3 def count():
    c=0
    fin=open("string.txt")
    s=fin.read()
    l=s.split()
    for x in l:
        if x[0].upper()=="A" and x[-1].upper()=="A":
            c+=1
    print("Number of words begining and ending with A/a ",c)
```

We read the entire content of the file and split the text , word by word into a list l

```

4 def TRANSFER():
    fin=open("string.txt")
    fout=open("CLEAN.TXT","w")
    s=fin.readline()
    while s:
        if s.upper().find("CLEAN")!= -1:
            fout.write(s)
        s=fin.readline()
    fin.close()
    fout.close()

```

find( ) returns -1 if the string given as parameter does not exists in the string.

```

5 def REPLACE():
    fin=open("letter.txt")
    s=fin.read()
    str=s.replace("I","We")
    fin.close()
    fout=open("letter.txt","w")
    fout.write(str)
    fout.close()

```

To modify contents of a text file, we read the contents into a variable, do the necessary changes and then write back to the file. When we open the file in "w" mode it will delete old contents

```

6 def CHANGE():
    fin=open("sample.txt")
    s=fin.read()
    str=s.title()
    fin.close()
    fout=open("sample.txt","w")
    fout.write(str)
    fout.close()

```

```

7 import os
def deletion():
    fin=open("string.txt")
    fout=open("temp.txt","w")
    s=fin.read()
    l=s.split()
    for x in l:
        if x.upper()!="TO":
            fout.write(x+" ")
    fout.close()
    fin.close()
    os.remove("string.txt")
    os.rename("temp.txt","string.txt")

```

To remove single occurrence of a word we could use the remove( ) function of the list. But here we transfer all words that is not TO, to another file and then use remove( ) and rename( ) functions of the os module