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Python Programming - 2301CS404

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Lab - 9

1 File I/O

1.0.1 01) WAP to read and display the contents of a text file. (also try to open the file in some other directory)

- in the form of a string

- line by line

- in the form of a list

```
[6]: # in string
fp=open("file.txt","r")
data=fp.read()
print(data)
fp.close()
# in line by line
fp=open("file.txt","r")
data1=fp.readline()
print(data1)
fp.close()
# in form of list
fp=open("file.txt","r")
data2=fp.readlines()
print(data2)
fp.close()
```

hiiii

heellooo

how are you??

[]

1.0.2 02) WAP to create file named “new.txt” only if it doesn’t exist.

```
[7]: fp=open("new.txt","x")
     fp.write('hiiii')
     fp.close()
```

1.0.3 03) WAP to read first 5 lines from the text file.

```
[24]: fp=open("file.txt","r")
     for i in range(0,5):
         print(fp.readline(),end="")
     fp.close()
```

```
hiiii
heellooo
how are you??
1234
56789
```

1.0.4 04) WAP to find the longest word(s) in a file

```
[55]: fp=open("file.txt","r")
     data=fp.readlines()
     max_len=0;
     data1=[]
     word=" "
     for i in data:
         i=i.split(" ");
         for j in i:
             data1.append(j)
     for i in data1:
         if(len(i)>max_len):
             max_len=len(i)
             word=i
     print(word)
     fp.close()
```

```
heellooo
```

1.0.5 05) WAP to count the no. of lines, words and characters in a given text file.

```
[65]: fp=open("file.txt","r")
     data1=[]
     lines=(fp.readlines())
     print(f"lines :{len(lines)}")
     for i in lines:
```

```

        i=i.split(" ");
        for j in i:
            data1.append(j)
print(f"word: {len(data1)}")
count=0
for i in data1:
    for j in i:
        count=count+1;
print(f"characters: {count}")
fp.close()

```

lines :3
 word: 5
 characters: 27

1.0.6 06) WAP to copy the content of a file to the another file.

```

[76]: fp=open("file.txt","r")
data=fp.read()
fp1=open("copy.txt","w")
fp1.write(data)
fp1.close()
fp.close()

```

1.0.7 07) WAP to find the size of the text file.

```

[87]: fp=open('file.txt','r')
data=fp.read();
print(len(data))
fp.close()

```

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1.0.8 08) WAP to create an UDF named frequency to count occurrences of the specific word in a given text file.

```

[6]: def count_occ(filename,word):
    data="";
    fp=open(filename,'r')
    data=fp.read();
    # print(data)
    data=data.split(word)
    # print(data)
    print(len(data)-1)

count_occ('new.txt','hiiii')

```

1.0.9 09) WAP to get the score of five subjects from the user, store them in a file. Fetch those marks and find the highest score.

```
[24]: fp=open("stu.txt",'w')
marks=input("enter marks comma separted")
mark=marks.split(",")
fp.writelines(mark)
fp.close()
print(max(mark))
```

enter marks comma separted 5,6,2,3,5,4

1.0.10 10) WAP to write first 100 prime numbers to a file named primenumbers.txt

(Note: each number should be in new line)

```
[14]: fp=open("prime.txt","w")
n1=2;
count=1;
n2=3;
fp.write("2")
fp.write("\n")
while(count!=100):
    flag=True
    for j in range(2,n2-1):
        if(n2%j==0):
            flag=False
    if(flag==True):
        fp.write(str(n2))
        count=count+1;
        fp.write("\n")
    n2=n2+1;
fp.close()
```

1.0.11 11) WAP to merge two files and write it in a new file.

```
[27]: fp=open("merge.txt","w")
fp1=open("file.txt","r")
fp2=open("new.txt","r")
fp.write(fp1.read())
fp.write(fp2.read())
fp.close()
fp1.close()
fp2.close()
```

1.0.12 12) WAP to replace word1 by word2 of a text file. Write the updated data to new file.

```
[1]: # replace 1 with hii
fp=open("merge","r")
fp1=open("updated.txt","w")
data=fp.read();
updated_data=data.replace('hello','khushi')
fp1.write(updated_data)
fp.close()
fp1.close()
```

1.0.13 13) Demonstrate tell() and seek() for all the cases(seek from beginning-end-current position) taking a suitable example of your choice.

```
[4]: fp = open("merge", "rb")
fp.tell()
fp.seek(3,0)
fp.read(4)
fp.seek(2,1)
print(fp.tell())
fp.close()
```

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