

File Handling in Python:

- file : It is used to store the data in permanently.
- steps of file handling:
 - 1) open a file
 - 2) apply method or do any operation.
 - 3) close the file
- open () function:
 - By using open function we can open the file in python and also read or write modes.
 - In open() functions returns the file object.
 - open() takes mainly two arguments, i.e (filename,modes)
 - syntax:

```
file_variable = open(filename,mode)
```

- Three basic modes in python:
 - read mode ->'r'
 - write mode ->'w'
 - append mode ->'a'
- close() function:
 - It is used to close file..
- with : By using with keyword we can close file in automatically...
 - syntax:

```
with open(filename, mode) as file_variable_name:  
    statements.
```

```
In [1]: # How to create the text file through program.. using write mode  
f1 = open('data.txt','w')  
print('new text file created!.....')
```

new text file created!.....

```
In [2]: f2 = open('marks.txt','w')  
print("create another text file!...")
```

create another text file!...

```
In [3]: # How to write the data into a file..  
f1 = open('data.txt','w')  
f1.write('Hello world welcome to appsd')  
f1.close()  
print("Data write successfully!.....")
```

Data write successfully!.....

file methods:

- read()
- write()
- readline()
- readlines()
- tell()
- seek()
- split()

```
In [4]: # How to read the data from the file..
f3 = open('marks.txt','r')
info = f3.read()# we can read entire data from the file..
print(info)
f3.close()
```

```
firstline
secondline
thirdline
apssdc python workshop
c programming
```

```
In [5]: # To read number of characters from the file..
f3 = open('data.txt','r')
data = f3.read(6)# here 6 is number of characters..
print(data)
f3.close()
```

```
Hello
```

```
In [9]: # How to print the lines from the file
with open('marks.txt','r') as f4:
    data1 = f4.readline()
    print(data1)
    print(f4.readline())
    print(f4.readline())
```

```
firstline

secondline

thirdline
```

```
In [10]: # read all lines from the file using readlines.  
with open('marks.txt','r') as f5:  
    print(f5.readlines())
```

```
['firstline\n', 'secondline\n', 'thirdline\n', 'apssdc python workshop\n', 'c p  
rogramming']
```

```
In [14]: with open('marks.txt','r') as f6:  
    print(f6.read())  
    print(f6.tell())# using tell() method we can get the cursor position.  
    print(f6.seek(6))# to move the cursor position  
    print(f6.tell())  
    print(f6.read())
```

```
firstline  
secondline  
thirdline  
apssdc python workshop  
c programming  
67  
6  
6  
ine  
secondline  
thirdline  
apssdc python workshop  
c programming
```

```
In [16]: with open('data.txt','r') as f7:  
    data1 = f7.read().split()  
    print(data1)
```

```
['Hello', 'world', 'welcome', 'to', 'apssdc']
```

```
In [19]: # TO check the file is exist or not?  
import os.path  
fe = os.path.exists('marks.txt')  
print(fe)
```

```
True
```

```
In [23]: filename = input("Enter filename!..")  
if os.path.exists(filename):  
    print("Already Exists!...")  
else:  
    print("Not Exists!...")
```

```
Enter filename!..student.txt  
Not Exists!...
```

```
In [25]: # how to delete file using remove method?
fname = input("Enter filename!...")
if os.path.exists(fname):
    os.remove(fname)
    print("file deleted successfully!.....")
else:
    print("file is does'nt exists so cant be delete!..")
```

Enter filename!...data.txt
file deleted successfully!.....

```
In [26]: # How to create new text file in different location..
filepath = "D:\\React_JS\\marks.txt"
file1 = open(filepath,'w')
print('new file is created!..')
```

new file is created!..

```
In [27]: # copy the data from the one file another file..
with open('marks.txt','r') as originalfile,open('student.txt','w') as copyfile:
    for line in originalfile:
        copyfile.write(line)
    print("success!.....")
```

success!.....

```
In [29]: #TO print the number of lines.
with open('marks.txt','r') as f7:
    data = f7.readlines()
    print(data)
    print("line count is",len(data))
```

['firstline\n', 'secondline\n', 'thirdline\n', 'apssdc python workshop\n', 'c p
rogramming']
line count is 5

```
In [30]: #To print the number of words in that file.
with open('marks.txt','r') as f8:
    data1 = f8.read().split()
    print(data1)
    print("word count is ",len(data1))
```

['firstline', 'secondline', 'thirdline', 'apssdc', 'python', 'workshop', 'c',
'programming']
word count is 8

```
In [31]: #TO print the number of charcters in that file..
with open('marks.txt','r') as charcount:
    data2 = charcount.read()
    print(len(data2))
```

67

```
In [33]: # To print the digits in that file..
with open('marks.txt','r') as dig:
    data3 = dig.read()
    for ch in data3:
        if ch.isdigit():
            print(ch,end=" ")
```

8 9 0 2 3 4

```
In [36]: # using functions we can read the data from the file..
def readfile(fname):
    rf = open(fname,'r')
    print(rf.read())
fname = input("enter filename!...")
readfile(fname)
```

```
enter filename!...test.py
def greeting():
    print("Hello everyone!...")
def addtion(a,b):
    return a+b
a=100
def factorial(n):
    f1 = 1
    for i in range(1,n+1):
        f1 = f1*i
    return f1
```

```
In [37]: # contact appllication
1.create one text file.. file name as records.txt
2.add student name
3.phone number-> apply validation
4.aadhar number->apply validation
5.gmail:->apply validation
Note: 5 student records..
```

```
File "<ipython-input-37-fc5687388940>", line 2
    1.create one text file.. file name as records.txt
    ^
```

SyntaxError: invalid syntax

```
In [38]: with open('marks.txt','w') as file1:
          file1.write("hello welcome!...")
          print("success!...")
```

success!...

```
In [39]: with open('marks.txt','a') as file1:
          file1.write("Good Evening!..")
          print("success!...")
```

success!...

```
In [ ]:
```