

Introduction to files

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Reading and writing files

#To read one line at a time

```
file = open("hello.txt", "r")  
line= file.readline()  
print(line)
```

#To read a list of lines:

```
file = open("hello.txt.", "r")  
data=file.readlines()  
print(data)
```

#To read entire file

```
file = open("hello.txt", "r")  
data=file.read()  
print(data)
```

To write to a file, use:

```
file = open("hello.txt","w")  
file.write("Hello World")  
file.close()
```

To append to file, use:

```
file = open("Hello.txt", "a")  
File.write("Hello World again")  
file.close
```

Writing data to a file

```
f = open("stud.txt","w");
```

```
write (data) #type of data is string
```

```
writelines(data) # type of data is list
```

```
f.close()
```

File copy program :

```
friendfile=open("friends.txt","r");
```

```
myfile=open("myfile.txt","w");
```

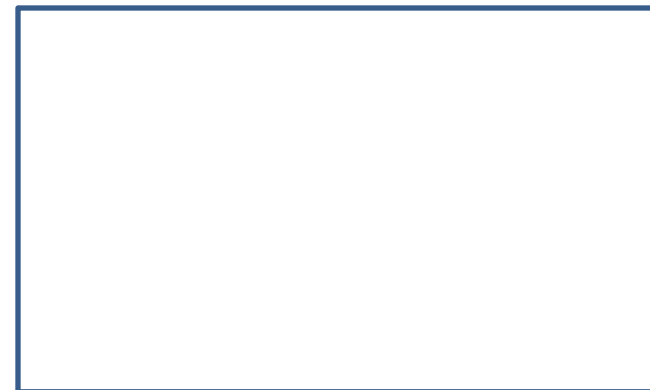
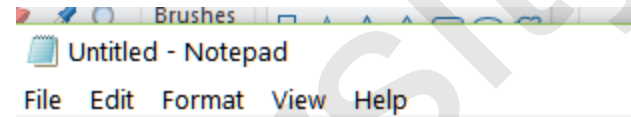
```
data=friendfile.read();
```

```
myfile.write(data);
```

```
print("successfully copied");
```

```
friendfile.close()
```

```
myfile.close();
```



Python Program to Count the Number of Lines in a Text File

```
fname = input("Enter file name: ")
```

```
num_lines = 0
```

```
file=open(fname,'r')
```

```
for line in file:
```

```
    num_lines += 1
```

```
print("Number of lines:")
```

```
print(num_lines)
```

```
file=open('test.py','r')
```

```
data=file.readlines()
```

```
print(len(data))
```

Problem Solution

1. Take the file name from the user.
2. Read each line from the file and increment the count variable
3. Print the line count.
4. Exit.

Finding frequency of all words in a file

Betsy bottom bought some butter,
but the butter was bitter!
betsy bottom bought some better butter ,
to make the bitter butter better.

Finding frequency of all words

```
data = open('data.txt', 'r').read()
```

```
data = data.replace('.', ' ').replace('!', ' ').replace('?', ' ').replace(';', ' ').lower()
```

```
words = data.split()
```

```
word_count = [(x, words.count(x)) for x in words]
```

```
print(set(word_count))
```

```
#source="quora"
```

Finding frequency of all words

```
data = ""betsy bottom bought some butter but the butter was bitter betsy  
bottom bought some better butter to make the bitter butter better""
```

```
words=data.split()  
d = {}  
for word in words:  
    if word in d:  
        d[word] += 1  
    else:  
        d[word] =1  
print(d)  
  
d.update({w:1})
```

```
import collections  
words=data.split()  
ctr=collections.Counter(words)  
print(ctr)
```


Finding frequency of all words

```
file = open('data.txt', 'r')
data=file.read()
data = data.replace('.', ' ').replace('!', ' ').replace('?', ' ').replace(';', ' ').lower()
words=data.split()
d = {}
for word in words:
    if word in d:
        d[word] += 1
    else:
        d[word] =1
print(d)
```

```
import collections
words=data.split()
ctr=collections.Counter(words)
print(ctr)
```