

**Day Objectives:**

- File Handling
  - Basic File Data Processing
    - Accessing and Modifying File Data
  - Character Count
  - Line Count
  - FileSize
  - Word Count
  - Unique Word Count

```
In [4]: 1 # Read a File - File Should Exist(read mode)
2 # Write into a File - Existing(append mode) or new file (Write mode)
3
4 def readFile(filePath):
5     with open(filePath,'r') as f:
6         filedata = f.read()
7     return filedata
8
9 filePath='DataFiles/data.txt'
10 print(readFile(filePath))
11
```

new data

Line 1

Line 2

Line 3

```
In [18]: 1 # Function to Write into a file
2 def writeintoFile(filePath,filedata):
3     with open(filePath,'a') as f:
4         for line in filedata:
5             f.write(line)
6             print('Data Has been added')
7     return
8 filePath = 'DataFiles/data.txt'
9 writeintoFile(filePath,'\n Updated data')
```

Data Has been added

```
In [23]: 1 #Function to Modify a file
2
3 def modifyFile(filePath,filedata):
4     with open(filePath,'a') as f:
5         for line in filedata:
6             f.seek(0)
7             f.write('Android \n' )
8             print('Data Modified')
9
10
11 modifyFile(filePath,filedata)
12
```

Data Modified

```
In [15]: 1 #Function to find Character Count in a file
2 fname = input("Enter the name of the file:")
3
4 def charCount(filePath,fname):
5     filePath = open('DataFiles/data.txt', 'r')
6     characters = 0
7     lines=0
8     for line in filePath:
9         lines = lines + 1
10        characters = characters + len(line)
11    print(characters)
12
13 charCount(filePath,fname)
```

Enter the name of the file:data  
80

```
In [32]: 1 #Function to find line count in a file:
2 fname = input("Enter the name of the file:")
3 def lineCount(filePath,fname):
4     filePath = open('DataFiles/data.txt', 'r')
5     lines=0
6     for line in filePath:
7         lines = lines + 1
8     print(lines)
9
10 lineCount(filePath,fname)
```

Enter the name of the file:data  
7

```
In [21]: 1 #Function to find word count in a file:
2
3 fname = input("Enter the name of the file:")
4 def wordCount(filePath,fname):
5     filePath = open('DataFiles/data.txt', 'r')
6     lines=0
7     words=0
8     for line in filePath:
9         wordslist=line.split()
10        words = words + len(wordslist)
11        lines = lines + 1
12    print(words)
13
14 wordCount(filePath,fname)
```

Enter the name of the file:data  
17

```
In [48]: 1 #Function to find unique word count in a file:
2 fname=input("Enter the file name : ")
3 def uniqueCount(filePath,fname):
4     count = {}
5     for w in open('DataFiles/data.txt').read().split():
6         if w in count:
7             count[w] += 1
8         else:
9             count[w] = 1
10    for word, times in count.items():
11        print("%s was found %d times" % (word, times))
12
13 uniqueCount(filePath,fname)
```

Enter the file name : data  
new was found 1 times  
data was found 1 times  
Line was found 2 times  
1 was found 1 times  
Lines was found 1 times  
2 was found 1 times  
Lines3 was found 1 times  
no was found 1 times  
4 was found 1 times  
Updated was found 1 times  
Data was found 1 times  
Android was found 1 times

```
In [50]: 1 #Function to get file size
          2
          3 import os
          4 fname = input('Enter the filename : ')
          5 def fileSize(fname):
          6     file_path='DataFiles/data.txt'
          7     with open(file_path,'r') as f:
          8         f = os.path.getsize(file_path)
          9     print(f)
         10 fileSize(fname)
```

Enter the filename : data  
63

```
In [43]: 1 #Command to print the file size
          2
          3 os.path.getsize('DataFiles/data.txt')
```

Out[43]: 63

```
In [ ]: 1
```