



# Experiment -3.1

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Subject Name: Python Programming Subject Code: 23 CSH 623

#### 1. Aim of the Experiment:

- i. Write a python program to read and write the contents into a file.
- ii. Write a python program to demonstrate different inbuilt functions related to file handling.
- iii. Write a python program to count the number of lines in a file.
- iv. Write a python program to demonstrate exception handling.

## 2. Objective of the Experiment:

- i. To demonstrate program to read and write the contents into a file.
- ii. To demonstrate different inbuilt functions related to file handling.
- iii. To program to count the number of lines in a file.
- iv. To demonstrate exception handling.

## 3. Algorithm/ Steps for Experiment

- **Step 1:** Create a python file to perform the python programs.
- **Step 2:** Use file handling in python.
- **Step 3:** Discover different in built functions of file handling.
- Step 4: Perform exception handling





## Code for Experiment (Read and write the contents into a file):

#### Reading -

```
file1 = open("C:/Users/ystan/OneDrive/Desktop/python/3.1lab.txt","r+") """reading"""
print("Output of Read function is ")
print(file1.read())
file1.close()
```

#### Writing -

```
file1 = open("C:/Users/ystan/OneDrive/Desktop/python/3.1lab.txt","w")
L = ["New entry"]
file1.writelines(L)
file1 = open("C:/Users/ystan/OneDrive/Desktop/python/3.1lab.txt","r+")
print("Output of Read function is ")
print(file1.read())
```

# **Result/Output:**

```
Output of the read function is
23MAI10003
Milan Sharma
Hello
```

```
In [30]: runfile('C:/Users/ystan/.spyder-py3/temp.py', wdir='C:/Users/
ystan/.spyder-py3')
Output of Read function is
New entry
```







## Code for Experiment (To demonstrate different inbuilt functions related to file handling.):

```
close(),read()
file1 = open("C:/Users/ystan/OneDrive/Desktop/python/3.1lab.txt","r+")
print("Output of Read function is ")
print(file1.read())
file1.close()
    readline()
file1 = open("C:/Users/ystan/OneDrive/Desktop/python/3.1lab.txt","r+")
print("Output of Read function is ")
print(file1.readline())
file1.close()
   write()
file1 = open("C:/Users/ystan/OneDrive/Desktop/python/3.1lab.txt","w")
L = ["New entry"]
file1.write (L)
file1 = open("C:/Users/ystan/OneDrive/Desktop/python/3.1lab.txt","r+")
print("Output of Read function is ")
print(file1.read())
file1.close()
    writelines()
file1 = open("C:/Users/ystan/OneDrive/Desktop/python/3.1lab.txt","w")
L = ["New entry\n","2ndNew enter"]
file1.writelines(L)
file1 = open("C:/Users/ystan/OneDrive/Desktop/python/3.1lab.txt","r+")
```





```
print("Output of Read function is ")
print(file1.read())
file1.close()

• tell()
    print(file1.tell())

• seek()
    file1.seek(0)
    file1.tell()
```

#### **Result/Output:**

```
In [30]: runfile('C:/Users/ystan/.spyder-py3/temp.py', wdir='C:/Users/
ystan/.spyder-py3')
Output of Read function is
New entry
```

Output of Read function is New entry 2ndNew enter

```
In [34]: runfile('C:/Users/ystan/.spyder-py3/te.
ystan/.spyder-py3')
Output of Read function is
New entry
2ndNew enter
23
```

```
In [35]: runfile('C:/Users/ystan/.spyder-py
ystan/.spyder-py3')
Output of Read function is
New entry
2ndNew enter
0
```







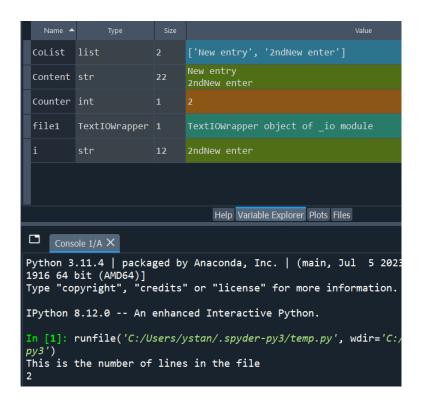
#### Code for Experiment (To count the number of lines in a file):

```
file1 = open("C:/Users/ystan/OneDrive/Desktop/python/3.1lab.txt","r")
Counter = 0
Content = file1.read()
CoList = Content.split("\n")

for i in CoList:
    if i:
        Counter += 1

print("This is the number of lines in the file")
print(Counter)
```

#### **Result/Output:**









## **Code for Experiment (Demonstrate exception handling):**

```
def fun(a):
    if a < 4:

    # throws ZeroDivisionError for a = 3
        b = a/(a-3)

# throws NameError if a >= 4
    print("Value of b = ", b)

try:
    fun(3)
    fun(5)

# note that braces () are necessary here for
# multiple exceptions
except ZeroDivisionError:
    print("ZeroDivisionError Occurred and Handled")
except NameError:
    print("NameError Occurred and Handled")
```

# **Result/Output:**

```
In [4]: runfile('C:/Users/ystan/.spyder-py3/temp.py', wdir='
py3')
ZeroDivisionError Occurred and Handled
In [5]:
```





#### **Learning outcomes (What I have learnt):**

- 1. I learnt read and write the contents into a file.
- 2. I learnt about inbuilt functions related to file handling.
- 3. Learned to count the number of lines in a file.
- 4. I learnt about exception handling.

#### Evaluation Grid (To be created as per the SOP and Assessment guidelines by the faculty):

Sr. No.	Parameters	Maximum Marks	Marks Obtained
1.	Student Performance (Conduct of experiment) Objectives/Outcomes.	12	
2.	Viva Voce	10	
3.	Submission of Work Sheet (Record)	8	

