

CourseName: Advanced Python Programming

Course code: 22CSH-623

Experiment: 3.1

- Aim:**
- a) Write a python program to read and write the contents into a file.
 - b) Write a python program to demonstrate different inbuilt functions related to file handling
 - c) Write a python program to count the number of lines in a file.
 - d) Write a python program to demonstrate exception handling.

Tools/Software Required: Jupyter Notebook and Python 3.10.7

Description: Python too supports file handling and allows users to handle files i.e., to read and write files, along with many other file handling options, to operate on files. The concept of file handling has stretched over various other languages, but the implementation is either complicated or lengthy, but like other concepts of Python, this concept here is also easy and short.

Pseudo code/Algorithms/Flowchart/Steps:

Step 1: `X = open("FILE_NAME", "OPERATION")`

Step 2: `X.read()` or `X.write("WHAT EVER YOU WANT TO WRITE")`

Step 3: `Print(X)`

Implementation:

```
print("-----Creating a file and write some text -----")
```



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```
X = open("file.txt", "w")
X.write("This is a \ndemo file.")
X.close()

print("-----Done file.txt created-----")

print("\n-----Reading text in the given file -----\n")

Y = open("file.txt", "r")
print(Y.read())

print("\n-----Appending more text in the given file -----")

Z = open("file.txt", "a")
Z.write("\nNow the file has more content!")
Z.close()

print("\n-----Number of lines present in the file -----")

count = 0
X = open("file.txt", "r")
for i in X:
    count+=1
print(f"\nNumber of lines present in the file are {count}")
print("\n-----Done -----\n")
```



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```
import os

if os.path.exists("file1.txt"):
    os.remove("file1.txt")
else:
    raise Exception("The file does not exist")
```

Output:

```
-----Creating a file and write some text -----
-----Done file.txt created-----

-----Reading text in the given file -----

This is a
demo file.

-----Appending more text in the given file -----

-----Number of lines present in the file -----

Number of lines present in the file are 3

-----Done -----

-----
Exception                                Traceback (most recent call last)
~\AppData\Local\Temp\ipykernel_4008\3291424908.py in <module>
      31     os.remove("file1.txt")
      32 else:
----> 33     raise Exception("The file does not exist")

Exception: The file does not exist
```