**Level 1: Reading a Text File**

1. Open a new Python Repl and run the following program.

fileHandle = open("myfile.txt","r")

fileContents = fileHandle.read()

print(fileContents)

fileHandle.close()

1. Why does this program produce a run-time error?

It produce the run time error because you have to add myfile.txt

1. Add a text file to your project as follows:
   * Click on “Add File” icon in the files pane/window.
   * Type “myfile.txt” and return.
   * “myfile.txt” is now open in the editor pane/window.
   * Type some text into “myfile.txt”
   * Make sure to add several lines of text

1. Switch back to main.py pile and run the program.
   1. What gets printed out?
   2. Explain the result.
2. Load and run the following program.

fileHandle = open("myfile.txt","r")

line = fileHandle.readline()

count = 1

while line :

print("Line ", count, " : ",line.strip())

line = fileHandle.readline()

count += 1

fileHandle.close()

1. Compare and contrast the output of the first and second program
   1. How is the read() function similar to the readline() function?
   2. How is the read() function different from the readline() function?
2. Research the Python open() function for file I/O (input / output).

a. How do you specify which file to open? Open a file  you go to Tools, and click on Folder Options. Now click on the **File** Types tab and scroll down to the **file** type extension you want to **change**, in our example TXT. Click on the **Change** button and the same dialog pops up like when you click Choose Program from the **Open** With menu.

Read or write (perform operation) **read**/**write** memory A type of memory that, in normal **operation**, allows the user to access (**read** from) or alter (**write** to) individual storage locations within the device. The choice of **read** or **write operation** is normally determined by a **read**/**write** signal applied to the device.

1. Close the file To close all open files and folders, on the Action menu, click Disconnect All Open Files.
2. To close a specific file or folder, in the Results pane right-click the file or folder name, and then click Close Open File.

b. Modify the program to open a different file.

If you don't see **Programs**, choose Default **Programs** > Associate a **file** type or protocol with a **program**. In the Set Associations tool, select the **file** type you want to **change the program** for, then choose **Change program**

1. Research how to open a file in a sub-directory.
   1. Modify the second program to open a file in a sub-directory.

At some times you will need to move a file from one folder to another, or copy a file from one folder to another, leaving the file in the first location and placing a copy of it in the second. You can move or copy a file or folder using a variety of methods. If the file or folder and the location where you want to move it are visible in a window or on the desktop, you can simply drag the item from one location to the other.

* 1. Demo your program to Mr. Nestor
  2. List your program modifications below

**Level 2: Writing a Text File**

1. Research the Python open() function for file I/O (input / output).
   1. What does the file mode “r” mean?

there **are** basically two **file** operations (read, write). **Mode r is**primarily for reading, **modes** w, a **are** primarily for writing. And the plus sign enables the

b. What mode is used to open a file for writing? File Handling. File handling in Python requires no importing of modules.

File Object. Instead we can use the built-in object "file". ...

Open() The open() function is used to open files in our system, the filename is the name of the file to be opened.

c. What other file modes can be used? List and explain their meanings.

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|  | The Maple I/O library makes use of a number of different concepts relating to kinds, modes, and types of files. For most file I/O operations, this can be safely ignored, but sometimes this information is important. Maple also makes use of files for saving and restoring Maple objects. For more information on these, see file |

1. Load and run the following program.

print("Enter test to write to a file")

print("Type STOP to end the program")

print(" ")

lineNumber = 0

while True :

lineNumber += 1

userPrompt = "Enter Line " + str(lineNumber) + " : "

userText = input(userPrompt)

if userText == "STOP" :

break

print(userText)

1. Modify the program to open a text file for writing.
   1. Demo your program to Mr. Nestor
   2. List your program modifications below
2. Replace the line “print(userText)” with a command to write the value of “userText” to an open file.
   1. Verify that text was written to your file
   2. Demo your program to Mr. Nestor
   3. List your program modifications below

**Level 3: Binary Files**

t.b.d.

<http://www.ece.ualberta.ca/~elliott/ee552/studentAppNotes/2003_w/misc/bmp_file_format/bmp_file_format.htm>