**Outline**

t.b.d.

**Objectives**

* tbd

**Materials**

* tbd

**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?

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. What gets printed out? 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).
   1. How do you specify which file to open?
   2. Modify the program to open a different file.
   3. How would you open a file in a sub-directory?
   4. Modify the program to open a file in a sub-directory.
3. Research the Python open() function for file I/O (input / output).
   1. What does the file mode “r” mean?
   2. What other file modes can be used? List and explain their meanings.

**Level 2: Writing a Text File**

**Level 3: Pixels & RGB**

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