**Student Questions:**

1. Refer to the lesson slides to do the following:
   1. Create a folder called “resources”
   2. Create a file called “myfile.txt”
   3. Select “myfile.txt” to be displayed in the Repl editor window
   4. Copy & paste the following text into “myfile.txt”

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

numLines = 0

for line in fileHandle:

print(line)

numLines += 1

print ("Number of lines is ", numLines)

fileHandle.close()

*Hello kind student\n*

*This is a message from your computer\n*

*I hope you are having fun learning to program\n*

*Remember to ask Mr. Nestor questions when you don’t understand.*

1. Refer to the lesson slides to create a program do the following:
   1. Open “myfile.txt” for reading
   2. Read each line from “myfile.txt” and print it to the console output
   3. Close “myfile.txt”
   4. Provide your program listing below.

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

numLines = 0

for line in fileHandle:

print(line)

numLines += 1

print ("Number of lines is ", numLines)

fileHandle.close()

1. Refer to the lesson slides to create a program do the following:
   1. Create “newfile.txt” and open it for writing
   2. Write several lines of text to the file
   3. Close “newfile.txt”
   4. Select “newfile.txt” to be displayed in the Repl editor window to confirm   
      the proper text was written
   5. Provide your program listing below.

fileHandle = open("newfile.txt", "w+")

fileHandle.write("Hello this is a new file.\n")

fileHandle.write("You should see this file when you ")

fileHandle.write("select the file in the file chooser window.")

fileHandle.close()

1. Research “ Python open() Text Files” to learn more about text files
   1. List and explain of the following modes: r, r+, w, w+, a, a+, x

Adding the + to a command is used to update an existing file rather than make a new one

R is the read file mode and reads a file for the text

W is the write file mode used to write files

X is the exclusive creation mode which doesn’t allow the file to be made if another already exists with the same name

A is used for opening and writing at the end of a file that already exists

1. Research “Python Binary Files” to learn more about binary data files
   1. List and explain of the following modes: t, b

T is the test mode and b is the

* 1. Explain the difference between a text file and a binary file

Binary files are files with no constraints that must be opened in the right program to work properly whereas text files contain only text and can be opened in any text reader.

* 1. List some applications that use text data files

Word, notepad and any other text editor.

* 1. List some applications that use binary data files

photoshop, paint, anything that uses non text files.

**Extension Question: (Optional)**

1. Write a program to do the following:
   1. Open a file for read, write and append.
   2. Print the contents of the existing file to console output
   3. Ask the user to type a line of text on the console input and store the text in a variable
   4. Ask the user if they want to append or overwrite the text in the file
   5. If they say “append” then append the new text to the end of the file
   6. If they say “overwrite” then delete the existing text and just add the   
      new text to the file
   7. Provide your program listing below.