**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”

*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)

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 text when you ")

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

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

* The r mode opens the file in read only mode which allows it to read the file from beginning to end
* The r+ mode opens the file for reading and writing and starts at the beginning of the file
* The w mode opens the file in write only mode and allows you to write stuff in a file
* The w+ mode opens the file for writing and reading
* The a mode opens a file for appending new information to a file
* The a+ mode opens a file for reading and appending
* The x mode opens and creates a new file

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

* The b mode is binary mode
* T mode is text mode
  1. Explain the difference between a text file and a binary file

A text file contains letters and numbers and symbols while a binary file only has 1s, and 0s.

* 1. List some applications that use text data files

Notepad, google docx, notepad2

* 1. List some applications that use binary data files

Pictures and audio files use binary.

**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.