**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)

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('This is a new file.\n')

fileHandle.write('WOW\n')

fileHandle.write('I made this happen.\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
      1. r = read file.
      2. r+ = read file and if not made, it creates it.
      3. w = write in file.
      4. w+ = write in file, if not made, it creates it.
      5. a = append file.
      6. a+ = append file, if not present, create it.
      7. x = Creates a new file.
2. Research “Python Binary Files” to learn more about binary data files
   1. List and explain of the following modes: t, b
      1. Opening a file in ‘t’ means opening in text mode, and binary mode is opened by the ‘b’ function.
   2. Explain the difference between a text file and a binary file
      1. The difference is that text files hold mainly text and miscellaneous characters, and the binary file holds numbers 1s and 0s.
   3. List some applications that use text data files
      1. Articles, notes, and word documents.
   4. List some applications that use binary data files
      1. It is used for images, video, and audio 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.