Lab 7A

Lab 7A - Code

```
#Line 2 opens the file and sets it to read
     with open("courses.txt", "r") as inFile:
 2
         #Lines 4 and 5 defines the variable count for each element in the inFile
 3
         for lineCount, line in enumerate(inFile):
 4
 5
 6
         #The variable lineCount is incremented by 1 for each line passed
 7
          print("Total Lines: ", lineCount + 1)
     inFile.close()
 8
 9
10
     inFile = open("courses.txt", "r")
11
     #The file is open and read
12
     myFile = inFile.read()
13
     #The length of the file is taken and stored in a variable
14
15
     charCount = len(myFile)
16
     #The count is printed
17
     print("Number of Characters: ", charCount)
18
     inFile.close()
19
     inFile = open("courses.txt", "r")
20
     #An individual counter is used
21
22
     wordCount = 0
     #The file is split and read
23
     myFile = inFile.read().split()
24
     #The for loop checks each word in the file to see if it is not numeric
25
26
     for word in myFile:
27
         if not word.isnumeric():
28
             #If the word is not numeric the count is incremented
29
             wordCount += 1
     print("Word Count: ", wordCount)
30
31
32
     #Expected Outputs:
33
     #Number of Lines = 3
     #Number of Characters = 39
34
     #Number of Words = 6
35
36
37
```

Lab 7A - Console

```
Debug I/O Python Shell

Commands execute without debug. Use arrow keys for h  to ptions 

Python 3.9.7 (default, Sep 16 2021, 16:59:28) [MSC v.1916 64 Type "help", "copyright", "credits" or "license" for more in 

>>> [evaluate Nguyen_Albert_and_Nguyen_Thomas_Lab7.py]
Total Lines: 3
Number of Characters: 39
Word Count: 6

>>> |
```

Thomas Nguyen, Albert Nguyen CS131-47853 MW 06:00 PM – 08:30 PM Lab 7A & 7B

Lab 7A - Output File

courses - Notepad

File Edit Format View Help

CS 170 Java 1

CS 150 C++ 1

CS 250 C++ 2

Lab 7B

```
Lab 7B - Code
```

```
D
                                                                               o x
Lab7B.py
 1 with open("Lab7bOutput.txt", "w") as outputFile :
 2
       lineHeading = 1
 3
       with open("Lab7bInput.txt", "r") as inputFile :
           for line in inputFile :
 4
 5
               lineText = line.strip()
               outputFile.write("/* %d */ %s\n" % (lineHeading, lineText))
 6
 7
               lineHeading = lineHeading + 1
 8
```

Lab 7B - Output Files

Reading from Lab7bInput.txt

PC > Documents > CS131-47853-homework > Chapter 7

Name	Date modified	Туре	Size
lyrics	3/20/2023 6:59 PM	Text Document	1 KB
lyricsReadingTest	3/20/2023 7:01 PM	Python Source File	1 KB
input	3/20/2023 7:37 PM	Text Document	1 KB
programmingAssignment3B	3/20/2023 7:39 PM	Python Source File	1 KB
programmingAssignment3A	3/20/2023 7:48 PM	Python Source File	1 KB
3aOutput	3/20/2023 7:48 PM	Text Document	1 KB
nguyen_albert_programming_assignment_3	3/20/2023 8:07 PM	Microsoft Word D	286 KB
💯 nguyen_albert_programming_assignment_3	3/20/2023 8:08 PM	PDF File	240 KB
	3/22/2023 8:00 PM	Python Source File	1 KB
Lab7bInput	3/22/2023 8:00 PM	Text Document	1 KB

Mary had a little lamb Whose fleece was white as snow. And everywhere that Mary went, The lamb was sure to go!

Writing to Lab7bOutput.txt

PC > Documents > CS131-47853-homework > Chapter 7 Name Date modified Size lyrics 3/20/2023 6:59 PM 1 KB Text Document lyricsReadingTest 3/20/2023 7:01 PM Python Source File input 3/20/2023 7:37 PM Text Document 1 KB 3/20/2023 7:39 PM programmingAssignment3B Python Source File programmingAssignment3A 3/20/2023 7:48 PM Python Source File 1 KB Text Document 3/20/2023 7:48 PM 1 KB Microsoft Word D... nguyen_albert_programming_assignment_3 3/20/2023 8:07 PM 286 KB __ nguyen_albert_programming_assignment_3 3/20/2023 8:08 PM PDF File 240 KB

3/22/2023 8:00 PM

3/22/2023 8:00 PM

3/22/2023 8:02 PM

Python Source File

Text Document

Text Document

1 KB

1 KB

1 KB

/* 1 */ Mary had a little lamb /* 2 */ Whose fleece was white as snow. /* 3 */ And everywhere that Mary went, /* 4 */ The lamb was sure to go!

Lab 7B - Console

Lab7bInput

Lab7bOutput

Python Shell: Wing

Python Shell: Commands execute without debug. Use arrow keys for history.

Python 3.9.7 (default, Sep 16 2021, 16:59:28) [MSC v.1916 64 bit (AMD64)] Type "help", "copyright", "credits" or "license" for more information.

>>>> [evaluate Lab78.py]

Lab 7B - Written Code

```
with open("Lab7bOutput.txt", "w") as outputFile :
    lineHeading = 1
    with open("Lab7bInput.txt", "r") as inputFile :
        for line in inputFile :
            lineText = line.strip()
            outputFile.write("/* %d */ %s\n" % (lineHeading, lineText))
            lineHeading = lineHeading + 1
```