PGR107 – Python Programming Spring 2023 Files & Exceptions

1. Write a program that carries out the following tasks:

Open a file with the name hello.txt.

Store the message "Hello, World!" in the file.

Close the file.

Open the same file again.

Read the message into a string variable and print it.

2. Write a program that reads a file containing text. Read each line and send it to the output file, preceded by line numbers. If the input file is

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

then the program produces the output file

```
/* 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!
```

Prompt the user for the input and output file names.

- 3. Write a program that reads a file containing two columns of floating-point numbers. Prompt the user for the file name. Print the average of each column.
- 4. Write a program that asks the user for a file name and prints the number of characters, words, and lines in that file.
- 5. Write a program that asks the user to input a set of floating-point values. When the user enters a value that is not a number, give the user a second chance to enter the value. After two chances, quit reading input. Add all correctly specified values and print the sum when the user is done entering data. Use exception handling to detect improper inputs.