HomeworkVI

COMSC-122

Fall 2017

HomeworkVI-A

- Write a program that will enter, from the keyboard, the name of a text file that you will type in.

- The program will assume that the text file contains a series of Integers.
  - It will then read in each of the Integers, counting and totaling the Integers as it progresses to the end.
  - When it's done reading the file, it will then compute the average of all the numbers typed in.
  - Finally, it will ask the user if they want to open up another file (y/n), and if so the above process will start all over again.

- Give your program the name: *YourName*-HwrkVI-A.py

- Run the program, and enter the file name: **numbers.txt** .
  - If you have written the program correctly, it should show the average (mean) of all the values in the file.

HomeworkVI

- Create a file called: **numbers2.txt** which has nothing in it.
  - Save this file and give it the name numbers2.txt
  - It is important that the file have nothing in it, not even a space.
  - Note: Canvas won't let me save such a file in your Dropbox, so you have to empty it yourself when you test HomeworkVI-A and HomeworkVI-B.
  - Do this right now. You will need it in order to proceed.

HomeworkVI-A

- Create a new file called: *YourName*-HwrkVI-A.txt
  - In this text file, please type the answers to the following questions:

1. Run the program, typing in the file name: numbers1.txt .
   a. What happens?
   b. What kind of an error did you get?

2. Try again, typing in the file name: numbers2.txt .
   a. What happens?
   b. What kind of an error did you get?

3. Try again, typing in the file name: badname.txt.
   a. What happens?
   b. What kind of an error did you get?

HomeworkVI-B

- You will now add additional code to HomeworkVI-A so that it will test for the exceptions that you got when you ran: numbers1.txt, numbers2.txt and badname.txt.
  - Call your new program: *YourName*-HwrkVI-B.py
- Modify the program so that it will handle any **IOError** exceptions that are raised when the file is opened and data is read from it.
- Modify the program so that it will handle any **ValueError** exceptions that are raised when the items that are read from the file are converted to numbers.
- Modify the program so that if the file was empty any attempt to divide by zero would be handled.
- Submit your three files: *YourName*-**HwrkVI-A.py,** *YourName*-**HwrkVI-A.txt,** and: *YourName*-**HwrkVI-B.py** to the dropbox for HomeworkVI.