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In-Class Programming 8 (Section 2)

Create the following program: Read a data file (data.csv download from Canvas) in a try, except, else, finally structure and calculate the sum of numbers on a per line basis contained in the file.

Part 1:

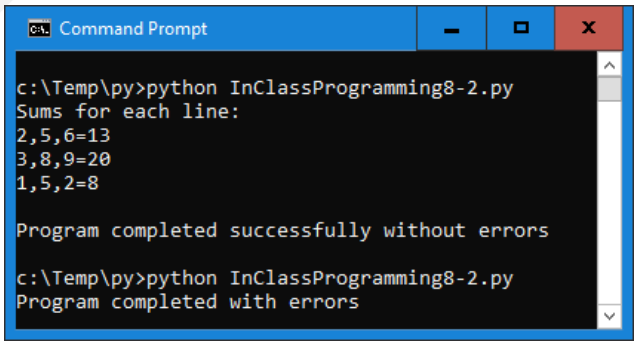
- Create variables sum initialized with 0 and strLine initialized with empty string
- Open the file data.csv storing the object into variable file
- Create a for loop to loop over the lines of the file
- Within the data file loop, create another for loop to loop over each character in each line
- Test for each character:
  - When it is a comma, skip the character
  - Otherwise calculate the sum of all numbers in a line and accumulate it into variable sum
- For each line, store the line concatenated with the sum into a variable (make sure to remove the line break from the original line and add it back after the sum)
- Reset the variable sum to zero for the next iteration

Part 2:

- Create two global variables named file and err. Initialize file with an empty string and err with a Boolean false
- Create a try, except, else, finally structure
- Wrap the part 1 code into the try part:
- The except part:
  - Test for a file not found exception
  - Set the err variable to a Boolean true
- The else part:
  - Display the sum for each line as shown below
- The finally part:
  - Test the file variable, when it is not equal to an empty string, then close the file
  - Test the err variable:
  - If it is true, display a message "Program completed with errors" (see output below)
  - If it is false, display a message "Program completed successfully without errors" (see output below)

Test your program in two ways and provide two screenshots or both runs in one screenshot as shown below:

- Execute the program, it should complete with no errors and display the sum
- Change the file name to data1.csv in your program and execute the program, it should now display the error message



Upload the following files to Canvas:

- Screenshot of the executed code in command line/terminal window (either pasted into a Word document or as an image)

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- Text files of your code named InClassProgramming8-2.py (put your name and section as comments at the top of file)

Notes:

- Upload the files (screenshot(s) and Python code as text file(s))
- Your code should contain some meaningful comments
- Your code should be well organized and formatted