Chapter 8 Rainfall

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Instructions:

Import the data from the file. Check to see if the data is valid, if it is not valid, indicate to the user what the bad data is. Total and average the data, and display formatted results on the screen.

Data:

Variables:

* File: reference to the opened txt file
* Components: temporary array containing the split elements from each line of the file
* Total: cumulative total of rainfall
* Count: number of valid rainfalls found in file

User input:

* None

Processing:

1. Try / except: Open ‘rainfall-totals.txt’ file
   1. If file can be opened, continue with processing
   2. If file can’t be opened, inform user and quit.
2. Loop through each line of the file
3. Split the line into an array containing the month and rainfall amount
4. Try / Except:
   1. If rainfall value can be converted to a float, then add it to the total and increment count by 1.
   2. If rainfall value cannot be converted to a float, inform user the value is valid. DO NOT add it to total. DO NOT increment count by 1.
5. If there’s at least one valid rainfall value
   1. Print the total
   2. Print the average
6. Otherwise, inform the user there were no valid rainfall valies.

Output:

A list of the months and their rainfall values, noting any that are invalid.

Total rainfall

Average rainfall