CS384 2022 Assignment 5 - Merge Output of Assignment 2, 3, 4 into a single assignment. Also the assignment should work on multiple XLSX file.

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Python 3.8.10 Install Instruction https://pastebin.com/nvibxmjw

Deadline: 15th Oct, 2022. 23:59. All of your git repos shall be pulled after that. That will be the version which will be checked.

Warning: Sharing is Caring is good for cat videos. Sharing of program may lead to plagiarism and would effect in 0 to both.

Doubts: All Doubts relating to CS384 2022 Assignment shall be posted on Google Form https://docs.google.com/forms/d/e/1FAIpQLSdS5liTGiRaluDIDARL7FH-XwN4oBJ1ZvE8f5cPcMaxftK44w/viewform?usp=sf_link

I will respond to the queries here: https://docs.google.com/spreadsheets/d/1QiKySHoGXoG8hOUhG7saDMI7eV4yOqK2LCTY2bt-Lys/edit?usp=sharing

Please avoid email / wa / dm

So common doubts can be solved and we shall be able to keep track in an organized manner.

Pull This Git Repo - https://github.com/Cs3842022/CS384_2022 and copy the tut04 to your repo folder. The Octant analysis is a series of assignments divided into 4 assignments. They have a dependence on the previous assignment. So Assignment 4, depends on Assignment 3, which depends on Assignment 2, and so on.

Git Requirements: At least 5 git commits should be there with meaningful comments (at least 4 words)

The entire code must be into multiple try, except block: Multiple Try Except should be the part of the code, so that if there is an error in a new file, the program throws the exception and does not stop. Also the number of rows should be read such that files bigger/smaller than this should be able to run by your code.

Library Requirements: You can use csv, pandas, or any other library / inbuilt module, but for evaluation you need to explain each line of code.

Help: How to tag the Octant. Please refer https://youtu.be/S5L43QT-gNs [Already placed in Tutorial 1]

Data Pre-processing: Subtracting mean from the original velocities and then working on the new values. https://youtu.be/R_epLjJzarU [Already placed in Tutorial 1]

Tasks:

1) The files to be processed are mentioned in input.txt Identify Octant's Longest Subsequence Count and Their Time Ranges From XLSX File You need to do processing from Excel format (not csv)
(see the
input_octant_longest_subsequence_with_range.xlsx & output_octant_longest_subsequence_with_range.xlsx).
2) Longest Subsequence Count for every Octant with time ranges. Details in the video: https://youtu.be/YkvioQb_2N8.

Input File: input_octant_longest_subsequence_with_range.xlsx

Input File: output_octant_longest_subsequence_with_range.xlsx
Sample Example is there in: small_longest_subsequence_with_range.xlsx