CS384 2022 Assignment 4 - Identify Octant's Longest Subsequence Count and Their Time Ranges From XLSX File

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

Deadline: 7th 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.

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) 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