

CS384 2022 Assignment 3 - Identify Octant's Longest Subsequence Count From XLSX File

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

Deadline: 30th Sep, 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/1QiKySHoGXoG8h0UhG7saDMI7eV4y0Qk2LCTY2bt-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 tut03 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.xlsx & output_octant_longest_subsequence.xlsx).
- 2) Longest Subsequence Count for every Octant. Details in the video: https://youtu.be/H37f_x4wAC0.

Input File: input_octant_longest_subsequence.xlsx

Input File: output_octant_longest_subsequence.xlsx

Sample Example is there in: small_longest_subsequence.xlsx