

# 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:** 31th 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.

**Pull This Git Repo** - [https://github.com/Cs3842022/CS384\\_2022](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](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](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