CS384 2022 Assignment 1 - Identify Octant Count From CSV File and Provide Octant Count Based on Mod Values

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

Deadline: 14th 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 and copy the tut01 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)

Library Requirements: You can use csv, pandas, or any 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

Data Pre-processing: Subtracting mean from the original velocities and then working on the new values. https://youtu.be/R_epLjJzarU

Tasks: 1) Find the individual count of each of the octant and write the overall count (see the octant_output.csv).

2) Take a user input for the mod value. This mod value will be used to break the file into ranges. So User Input of Mod 5000 breaks the ranges as 0-5000, 5001-10000, 10001-15000, 15001-20000, 20001-25000, 25001-Last. The max value will never exceed 30,000. Here now you need to give the overall count of each octant in each of the mod ranges too, (see the octant_output.csv).

Input File: octant_input.csv

Input File: Octant_output.csv