Final Project

Part 1

You will design a program that manages student records at a university.   You will need to use a number of concepts that you learned in class including: use of classes, use of dictionaries and input and output of comma delimited csv files.

<u>Input:</u>

a) StudentsMajorsList.csv   --   contains items listed by row. Each row contains student ID, last name, first name, major, and optionally a disciplinary action indicator
b) GPAList.csv -- contains items listed by row. Each row contains student ID and the student GPA.
c) GraduationDatesList.csv – contains items listed by row. Each row contains student ID and graduation date.

Example StudentsMajorsList.csv, GPAList.csv and GraduationDatesList.csv are provided for reference. Your code will be expected to work with any group of input files of the appropriate format. Names, majors, GPAs and graduation dates can and will likely be different from the examples provided.

<u>Required Output:</u>

Processed Inventory Reports:
a. FullRoster.csv -- all the items listed by row with all their information . The items should be sorted alphabetically by student last name. Each row should contain student ID, major, first name, last name, GPA, graduation date and indicate if disciplinary action was taken. The student attributes must appear in this order in each row.
b. List per major, i.e ComputerInformationSystemsStudents.csv -- there should be a file for each major and the major needs to be in the file name, the spaces in the major name should be eliminated for the file name.   Each row of the file should contain student ID, last name, first name, graduation date, and indicate if disciplinary action was taken. The students should be sorted by their student ID.
c. ScholarshipCandidates.csv – should contain a list of all eligible students with GPAs > 3.8. Students who have graduated or have had disciplinary action taken are not eligible. Each row should contain: student ID, last name, first name, major, and GPA. The students must appear in the order of GPA from highest to lowest.

d. DisciplinedStudents.csv –all students that have been disciplined. Each row should contain: student ID, last name, first name, and graduation date. The students must appear in the order of graduation date from oldest to most recent.

Commit all your .py files on Github. Provide a link on BlackBoard. Put all your files in a folder named "FinalProjectPart1" and name your files with the starting phrase "FinalProject" for example FinalProjectInput.py

Comment your code extensively. Include comment block with your name and student ID at the top of every .py file.