CS 121 – Week 9 Worksheet – File IO and Classes

Syntax Work:

This assignment uses the class you developed in last week's worksheet, i.e. in *Student.h*.

It will be easiest to use the Student.h file supplied in this week's folder (on Github).

In this exercise there is one file to complete: *file-io-main.cpp*

file-io-main.cpp:
- Implement the following functions (prototypes are given for your convenience):
  - *load_from_file*: Loads student data from a file
    - The maximum amount of students in a class is 30.
    - If the user puts more than 30 students in a class, ignore the rest.
    - If the user puts 30 or more students in a class, print the last student accepted.
    - An example of a Student data file is shown on the next page (three students).
    - Assume the student names have no white-space in them.
  - *find_student*: Search for a student in the student array
  - *print_list*: Print all students in the student array
- **NOTE:** Arrays are passed by-reference, so don't worry about that part.

Questions (to think about before tackling the code):

1. How can we keep a limit on how many students we read in?

2. How do we read data inside a file? Think of *cin/cout's* similarities to *ifstream/ofstream*.

3. How do we give the user the option to search by name or by id?

Student data example (for my name, id, grade work; tweak the below for your class variables):

John
1234
77.66
Becky
5555
88.50
Zeed
5513
90.30
…etc…