# CS 255 Computer Science II Spring, 2022

**Assignment #1**

**Value: 20 points**

A data file will be provided that contains the first names followed by 5-digit IDs (separated by a single space), one line per student, for a class. You should write a program that stores this information using parallel arrays. You can assume that the data file will be named "students.txt" and will contain information with no more than 100 students. You can also assume that none of the first names will contain any spaces.

Your program must contain four functions:

* Read data from the file into the parallel arrays. The function should also update the number of students actually read in from the file.
* Print the contents of the arrays. Column headings should be displayed. Use the setw command to have the names aligned to the left. Use the setfill command to display leading zeroes for IDs so that 5 total digits will be displayed.
* Sort the arrays alphabetically by students' first names. Whenever two names are swapped, the corresponding IDs should also be swapped.
* Search for a student based on a given student ID. Return the position of the matching item. If an ID does not exist, -1 should be returned.

Write a main driver program that will test all of these functions.

**What to turn in**: Upload your source code to Canvas under Assignment #1.

**NOTES**: Use good programming conventions:

* Proper use of white space
* Good naming conventions for constants, variables, and function names
* Comment block at the top of the program with required components (name, course, assignment, date, program description)
* Comment block above each function with the five pieces (function name, function description, incoming, outgoing, return)

