CS 185
Programming Assignment 4

Details

This is a short assignment to mainly help you practice with arrays.
In this lab we are going to create 3 functions "**SelectionSort**" , "**Sort5by10**" and "**Print5by10**".

Name	SelectionSort
Prototype	void SelectionSort(int Array[], unsigned int Size)
Description	This function takes a one dimensional array with its size and sorts it using the selection sort algorithm.

Name	Sort5by10
Prototype	void Sort5by10(int Array[5][10])
Description	This function takes a 5x10 array and uses the SelectionSort function in order to sort every row in it.

Name	Print5by10
Prototype	void Print5by10(int Array[5][10])
Description	This function takes a 5x10 array and displays it row by row.

In order to know how the selection sort works you need to check the following link:

http://en.wikipedia.org/wiki/Selection_sort#Algorithm

You are given a file called **main.cpp**, which includes the main function for you to use. There are three functions prototyped in that file, one for each of the functions you are to write. As always, you must implement all three functions *exactly as prototyped.* You will implement the functions in a file named **sorting.cpp.**

An **output.txt** file is given to you so that you can compare your output with the expected output.

<u>Note:</u>   I expect the exact output. So be careful and use a tool (such as: WinMerge) that will check the difference between two text files.

This assignment will not require you to include any header files in your code. All of the code that you write must be in the file mentioned above since you will not be turning in *main.cpp*.

REPEAT: **You will not turn in main.cpp**, so any changes you make to **main.cpp** will not be seen by me. Also: **NEVER PUT A main( ) FUNCTION IN YOUR FILE. EVER.** (Unless instructed to do so...)

Comments

In this and future assignments, you are required to include:

- **A file header comment in every piece of source file. The format is shown in the "Comments.cpp" file given to you in the beginning of the semester and should be present at the very top of all your code.**

- **Function header for each function you create. The format is shown in the "Comments.cpp" file given to you in the beginning of the semester and should be present at the top of every function.**

- **Inline commenting for your code.**

What to submit

You must submit the CPP file (*sorting.cpp*) in a single .zip file (go to the class page on moodle and you will find the assignment submit link). *Do not submit any other files than the ones listed.*

If you've forgotten how to submit files, the details are posted in the syllabus and in the assignment guidelines document. Failure to follow the instructions will result in a poor score on the assignment (and possibly a zero).

Special note:

The due date/time posted is the positively latest you are allowed to submit your code. Since the assignments can easily be completed well before the deadline, you should strive to turn it in as early as possible. If you wait until the deadline, and you encounter unforeseen circumstances (like being sick, or your car breaking down, or something else), you may not have any way to submit the assignment on time. Moral: **Don't wait until the last day to do your homework.**