Extra Credit Assignment 7 (Ex7)

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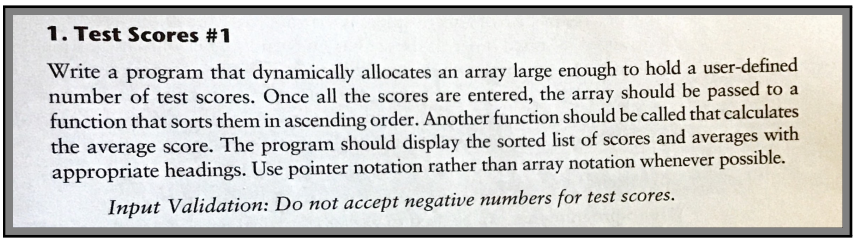
Problem.



1. Test Scores #1

Write a program that dynamically allocates an array large enough to hold a user-defined number of test scores. Once all the scores are entered, the array should be passed to a function that sorts them in ascending order. Another function should be called that calculates the average score. The program should display the sorted list of scores and averages with appropriate headings. Use pointer notation rather than array notation whenever possible.

Input Validation: Do not accept negative numbers for test scores.

Figure 1: p.701, Programming Challenge #1

- You goal is to get the same output I have, given the same inputs. You do not have to have the same titles, etc, I have however. I'm interested in you transforming the same data and arriving at the same output.
- Do not get creative and add features - save that for your homework. These are supposed to be short and quick assignments.
- Use a source file header just like your homework assignments.
- The purpose of these assignments is to reinforce concepts from the material we are currently studying. That's why they are only worth 50% when they are late - they don't apply to the material we are studying anymore.

Output.

```
calebfowler@ubuntu:~/Desktop/Ex7$ ./a.out
Enter the number of scores to process: 4
Enter the test scores
Score 1: 80
Score 2: -12
Test scores must be positive. Try again.Score 2: 100
Score 3: 80
Score 4: 85
80, 100, 80, 85,
80, 80, 85, 100,
The average score is 86
calebfowler@ubuntu:~/Desktop/Ex7$
```

Figure 2: Aim to produce something similar to this.

Due Date and Turn In.

I ONLY accept homework through the Canvas Dropbox. Do not add it to the submission comments or email it to me - I will not accept it. Turn homework in by uploading to the appropriate Canvas

Dropbox folder. Save your homework as a .cpp file. Don't zip or otherwise compress your files. Do NOT split your file up into multiple files. I know that is a standard industry practice, but it just get's in the way for this class.

Create a file with the following naming format: W12345678.cpp (your w number). This allows me to sort the class in alphabetical order - don't stand out here! If you are having trouble submitting the assignment, email me immediately. Don't change your filename if you make multiple submissions - Canvas will keep track of them and download the latest one by default.

This assignment is due MONDAY at 11:59 PM . If you exceed that date and time, your work is late. Build 5 - 10 minutes into your estimates to upload the file! [1] Canvas records the date and time the upload COMPLETES. Late work is still acceptable, but it is worth half as much. That is, there is a 50% penalty for late work. You may turn late work in up until the following Sunday at 11:59 PM OF THE WEEK THE ASSIGNMENT IS DUE. Once Canvas closes I will not accept an assignment.

[1] Pro-Tip: Get a bare bones copy of your code running and turn it in. Then go ahead and modify it with more specifications and whatnot. Upload it with the same name when you finish. That way, if something unexpected happens, you have some working code turned in. Canvas downloads the latest version to me by default. Risk management, class, risk management.