

CS 1313 010 Fall 2007 Homework #13

Quiz to be held in class 10:30-10:45am Monday November 19 2007

Rewrite the program from Homework #11, the one that counts the number of negative values, the number of positive values and the number of zeros in an integer array. Instead of performing these counts inside the main program, each count should be calculated by a USER-DEFINED FUNCTION.

Specificially, the program should:

- greet the user,
- prompt for and input the length of the array;
- idiotproof the array length;
- dynamically allocate the array;
- check that the allocation was successful;
- prompt for and input the values in the array;
- count the number of negative values **by calling a USER-DEFINED FUNCTION;**
- count the number of positive values **by calling a USER-DEFINED FUNCTION;**
- count the number of zeros **by calling a USER-DEFINED FUNCTION;**
- output the numbers of negative, positive and zero values in the array;
- deallocate the array.

NOTE: You MUST calculate each of the three counts in ITS OWN user-defined function; you are ABSOLUTELY FORBIDDEN to calculate more than one of them in the same user-defined function.

You DON'T have to use comments. Otherwise, all rules for Programming Projects (through PP#6) apply.

For this Homework question only, you may submit a script file of the standard kind, in lieu of writing the answer to this question by hand. You DON'T need to submit a cover, summary or flowchart, but the first page of the script file should be **clearly labeled** with your name and "Quiz #13" **at the top**. You MUST run the program using an array length of at least 10 and at least two of each kind of value.

If you use ANY resources other than Dr. Neeman, Mr. Jones, Mr. Phillips, the course textbook or the materials posted on the course webpage, you MUST reference them on the quiz. **THIS INCLUDES YOUR CLASSMATES, FRIENDS, PROFESSORS, ETC.**