

CS 1313 010 Fall 2007 Homework #11

Quiz to be held in class 10:30-10:45am Monday November 5 2007

WRITE A PROGRAM that counts the number of negative values, the number of positive values and the number of zeros in a `float` array.

Specifically, 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;
- count the number of positive values;
- count the number of zeros;
- output the numbers of negative, positive and zero values in the array;
- deallocate the array.

HINT: To determine how many of the input values have a particular property, you need to examine each value in turn to see whether it has that property. Specifically:

1. Before you start examining the input values, the number of input values that you've examined so far that have that property is zero.
2. Examine each input value in turn. If it has the property, then the number of input values that you've examined so far that have that property increases by one.

NOTE: You **MUST** calculate each of the three counts in its own `for` loop; you are **ABSOLUTELY FORBIDDEN** to calculate more than one of them in the same `for` loop.

You **DON'T** have to use comments. Otherwise, all rules for Programming Projects (through PP#5) 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, nor upload to Desire2Learn, but the first page of the script file should be **clearly labeled** with your name and "Quiz #11" **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.**