

TCES 202

Advanced Computer Programming

Assignment 0 – 201 Review

15 Points

This is a review assignment for topics covered in TCES 201. Run the *executable* to understand the behavior of the program. Starter code (review.c) is provided along with this description.

Write a program using pointer variables and dynamic storage to input a list of real numbers of unknown length from a given file (real1.txt), sum and count all the positive numbers, sum and count all the negative numbers, count of positive numbers above average, and count of negative numbers above average.

Assume the first number in the list is an integer indicating the length of the list. Assume that each floating point number including sign will not be more than 9 characters long which means that 10 is a good length to use to read the input from the file. BUFFER_LEN is already defined for this purpose that you may want to use.

Make sure that your program works for other input files (real2.txt). In other words, don't hard code the length but use the length from the file to dynamically allocate. You must use calloc or malloc to dynamically allocate the array and of course, use free to release (already done for you) the memory when done.

Submission Instructions: Submit the code on Canvas under Assignment 0 Submission link as *review.c*. Formatting, appropriate variable names and conventions, readability and commenting are all considered while grading. Don't forget to create a header at the top of the file in the format below.

/**

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This program <description>.

*/