

CSCD 240

Lab 8

SPECIFICATION

You will write a statistics program which will maintain an array of int values and then perform various operations on the array:

- Compute the mean of the array
- Compute the median of the array
- Compute the standard deviation of the array

When the program starts you will prompt the user for the name of the input file. If the file can't be opened then report the user. The first number on each line will contain the number of ints to follow. After reading in the total for each array, you will then create the array and fill it with the numbers from the file.

You will then perform the above calculations on the array. The user will be prompted for the name of an output file and the information will be written to both the screen and the output file. If for any reason the output file can't be opened then display an error message and exit the program.

You will compute the above on different arrays that are in the file. I have provided cscd240Lab8.c. This file cannot be changed in any fashion.

In canvas I have provided a simple worksheet on how to compute the above values.

TO TURN IN:

A zip file that only contains

- All C files needed to compile and run your program
- All input files
- All output files
- A Makefile with the target of lab8 – NOTE: you gcc line at the end of it will need to contain -lm (that is dash L M but lower case)

Name the zip file your last name first letter of your first name lab8.zip (Example: steinerslab8.zip)