

Pointer Extra Credit

For an extra credit point, combine the elements of the pointer lab as follows:

1. “Convert” the findminmax main program into a module with one function called `findminmax`. You’ll need to determine a reasonable signature for this function. You may also want to change the type of value it works with.
2. Using both the findminmax and stats modules, write a program that reads in data from two files and reports which file contains the value with the greatest distance from the file’s mean. (More details on input and output below.)
3. Of course, update the makefile to deal with all the modules.
4. Email me a zipfile containing your source code, makefile, and input files. This is due by 11:59 pm on Wednesday, March 15.

Input Format

Your input files should be formatted as follows: the first line contains a single integer value indicating the number of values that follow. Each subsequent line should contain a single double value.

Your program should either ask for the names of the two input files, or look for them on the command line.

Output Format

Your program’s output should simply be a line of the format:

The file <filename> contains the value most distant from its mean. The distance is <distance>.

If the “max distance” of the two files is the same, just pick one to output.