

CS 149D
Recitation, March 27, 2006
Change an Existing C++ Program

Objective: Make some simple changes to an existing program.

Change the program `fileexample.cpp` so that it will find the Max even if the file contains only negative numbers. You will need to make a copy of the program and the data file (`mydata.txt`) on your machine.

- a. You will need to read the first value in the file into the Max variable. This will require you to add new statements.
- b. This is most easily done if the new statement is not inside the while loop.
- c. Add code to the program so that it also finds the minimal value. You will need a new variable for this. You will also need to add a new if statement, similar to those for maximum, to find the minimal value. You should also add a cout statement to display the minimal value. Similar to (a) above, include a label with the number.

Think about how you might do this before you make any changes to your program. Ask for help from the lab instructor unless you are confident you have a solution.

- d. You need to make sure your program is working correctly. Using the file `mydata.txt` makes this hard to do since it has so many numbers in it. So you need to make a second version of this data file called `mydata2.txt`. This file should only have 3 or 4 numbers in it so you can easily figure out the average, the maximum and minimum values. Then run your program using this file (you will need to change the line with `mydata.txt` to `mydata2.txt` so it will read this new file).
- e. You need to correct the comments in the program so that they describe your new program.

You need to add a line in the first set of comments to include your name as programmer and today's date, such as:

```
// Programmer: <your name>  
// Date: <today's date>
```

After you have your program working and you have changed the comments, print it, and give it to your lab instructor. Make sure your name is in your program!