

CS 149D  
Recitation, March 20, 2006  
**Change an Existing C++ Program**

**Objective:** Make some simple program changes.

The examples in class were not very easy to use since a user had to guess at what to do to use the program. Change the program `findminArrays.cpp` to make it easier to use.

1. Add `cout` statements to prompt users for input. Remember, a `cout` statement can have the form:

```
cout << "some text string as appropriate" << endl;
or
cout << "some text string" << variable1 << endl;
or
cout << "some text" << variable1 << "more text" << variable2 << endl;
```

Any mixture of variables and text string can be included, but you must place the "<<" symbols between them.

Also modify the `cout` statement that displays the minimum value so that it also labels the number it prints. So if minimum were -5, rather than just displaying the number, the program should display:

```
minimum: -5
```

2. Make the `findminArrays.cpp` more useful by having the program ask the user how many numbers they intend to enter.
  - a. Assume they will always enter fewer than 100, so you need to change the size of the array accordingly.
  - b. You will need to introduce a new variable to store this size. This variable should be used in the for loops to determine how many times the loop executes.
  - c. You need to correct the comments in the program so that they describe your new program.
  - d. You need to add a line in the first set of comments to include your name as programmer, such as:

```
// Programmer: <your name>
```

- e. Add code to the program so that it also find the maximal value. You will need a new variable for this. You will also need to add new if statements, similar to those for minimum, to find the maximal value. You will also need to add a `cout` statement to display the maximal value. Similar to 1 above, include a label with the number.
3. After you have your program working, make sure your name is included as a comment, print it, and give it to your lab instructor.