

Lab 6 Drill

Loop practice

3 October 2019

Lab this week is getting more practice with loops, as we get ready for the exam. The “drill” is essentially to get started with the first few problems. These are in a slightly different style than our usual drills—a separate program for each lettered problem.

For the string-related ones, remember that the book mentions a variety of useful string operators and functions.

In all the problems on this lab, don’t prompt the user (it’ll break my test cases).

- a. Reads in two positive integers (the first less than the second) and prints out all the even numbers between them (including the numbers themselves, if they’re even), each on their own line. So if the inputs were 6 and 10, the program would print 6, 8, and 10. (Hint: what’s the remainder when you divide an even number by 2?)

This problem is on repl.it as Lab 6 a.

- b. Reads numbers into a `vector<double>` and then prints out all the numbers that are within 0.5 of the largest number, in the order they were inputted. (So if the inputs were 2.0, 1.5, 2.6, 2.2, 1.9, 0.8, it would print out 2.6 and 2.2.) Note that this requires *at least two* loops—one to read in the numbers and keep track of the highest, and a second to go through and print the ones you want. You might even prefer three (one to read, one to find the highest, and one to filter which ones you want). (For this problem, do not use built-in functions to compute the largest value.)

This problem is on repl.it as Lab 6 b. You can assume that all the inputs end with a non-numeric line (which will cause your input loop to properly terminate).