CSCI-14 Lab #6 – simple loops, due 3/6/18

Please work in groups of two on these. Work with someone you have not worked with before. See me if there are an odd number of students.

1) Write a program to implement the algorithm discussed in class today, e.g., get a series of integers from the user stopping at the first entry <= 0 (the sentinel), then print the sum, count and (floating-point) average of the series if they exist, otherwise a message indicating there are no statistics. All values except the average are integers. Use the basic design from class. Test with several series, including one with no entries before the sentinel (which will have NO statistics at all).

2) Write a second program that prompts the user for two numbers then counts from the first number to the second number regardless of direction. For example, if the user enters 2 and 5, print 2 3 4 5, and if the user enters 6 and 2, print 6 5 4 3 2, and if the user enters 7 and 7, print 7. You may print either down or across the screen.

   You may have no more than two loops: one counting up, and one counting down. You may have other control structures. Set your loops up so that the case of the user entering 5 and 5 works correctly to print just 5.

   You can actually do this with only one loop. It is not necessary for this lab, but I would like you to think about how to design this to use only one loop. You may have other control structures. It is an interesting early easy looping problem. Test a few counting up, a few counting down and at least one with the same starting value and stopping value.

You may collect the test runs for each program together in a file for each program. Turn in both programs and both output files on one email. Name the files in a way that tells me what each is. CC your lab partner on all lab emails.