

Lab 7 file

Due Date: Sunday, 10 Aug, 23:59:59

1.

Write a program to count the number of characters and words in a file. Obviously there are spaces. But the amount and variety of punctuation can be bewildering. Restrict your input to space, period, comma, exclamation points, and question marks. Assume no typos. Though remember, depending upon the style guide there can legally be two spaces after a period.

HINT: Please practice incremental development and work in small pieces. Start with just a space for a separator. Then add possible double spaces. Then add the other punctuation one at a time. Although after you get the first punctuation working correctly, the reminder should be simply modifying conditions or duplicating code.

2. Chapter 12, programming project 6.

Write a program that merges the numbers in two files and writes all the numbers into a third file. Your program takes input from two different files and writes its output to a third file. Each input file contains a list of numbers of type int in sorted order from the smallest to the largest. After the program is run, the output file will contain all the numbers in the two input files in one longer list in sorted order from smallest to largest. Your program should define a function that is called with the two input-file streams and the output-file stream as three arguments.

Remember to check all files to make sure they open correctly.

HINT: Please practice incremental development and work in small pieces. As an example- First open a file and print it to the screen. Then add the output file and just copy the first file into the second. Then add the second file and just copy each into the output file. Once all of that is working, add the sorting of the input from the 2 files into the third. Again, this is an example but work in small pieces to make debugging easier.

HINT: Don't test on just 2 input files. There are at least 4 (significantly) different configurations of input files that could change the behavior of your program.

You should also include a copy of 2 input files you used for testing. That way if we have a question we can make certain that the program worked correctly for you. The TAs are welcome to create their own files to test your program.

Don't forget to put all your files into a single archive.