

Practice Problems from Rika - You must be able to do these if you are in CS311

To test to see if you are ready for CS311, see if you can write all these programs.

You may use only cin and cin.getline.

Run the program by doing `./a.out < inputfilename`

This will take all cin from the input file.

1) write a program to read in a line at a time into a string, and for each

- convert each alphabetic character to lower case and store into a string
- display the line

2) write a program to read in a line at a time into a string, and for each

- extract out each word and display the word preceded by the counter
- e.g. 1 apple 2 berry

3) write a program to read a character at a time

- read into a and b alternatively into struct x {char a; int b};

4) write a program to reverse a input string in place.

To test to see if you are ready for 400 level classes, see if you can write all these programs.

p1) write a program to find all combinations of letters in an array (set of 1, set of 2, set of 3 etc.)

p2) write a program to find all permutations of letters in an array

p3) write a program to find the length of a sequence of numbers

e.g. 1 2 3 4 7 9 = 4 because of 1-2-3-4

e.g. 3 5 6 6 7 8 = 4 (because of 5-6-7-8; repeated numbers in a sequence are skipped)

What else you should be able to do at this point:

- Recall how to convert character digit into int digit. i.e. '1' to 1
- Make sure you know how to display things at a specific column right justified (use setw)