

Assignment #5

Write a C++ program that will read text from a file, and produce the following results.

1. Count and print the number of times each letter of the alphabet appears in the text. Treat upper and lower case letters as the same.

Count and print the number of words in the text.

3. Count and print the number of words of each size (i.e. number of 1 letter words, number of 2 letter words, number of 3 letter words. etc.). Assume no word is more than 10 characters long.
4. Print the text 10 words per line.

The data file to be used can be found on the network as

http://eilat.sci.brooklyn.cuny.edu/cis1_5/cisclasspage.htm/catinhat.txt

or may be obtained from your instructor. Be sure to use the structured programming techniques we have learned in class. Do not use external variables, unless you are prepared to justify their necessity. Use meaningful variables and comment each function.

Suggestions:

- While developing and testing your program use a smaller datafile than the one specified above.

Use two arrays for your counters. The first should be of size 26 (to count the alphabet), and the second should be of size 10 (to count the words of various sizes).
- Scan and process the text one character at a time, looking for white-spaces, using the techniques we developed in class.
- Refer to the examples used in class, for useful algorithms.