

There is a program written that reads from standard input and keeps track of words that are read. Here a "word" is any contiguous sequence of alphanumeric characters. The program displays a list of words found along with their frequency of occurrence. The words are output in alphabetical order with 3 words per line. The program also tells the user how many words (both total and distinct) were read. Sample output from words.5 would be like that below:

Word	Count	Word	Count	Word	Count
All	1	As	1	Dick	1
Dick,	1	Did	1	Jane	1
Jane,	1	Spot	1	Spot's	1
Spot?	1	a	5	account	1
after.	1	ago,	1	altered	1
and	1	away	1	brokerage	1
but	1	computer	1	end.	1
engineer	1	ever	2	executive	1
expect,	1	few	1	firm.	1
for	2	happened	1	happily	1
happy	1	he	1	his	1
is	2	large	1	lived	1
major	1	might	1	never	1
of	1	passed	1	personality.	1
pleasant	1	senior	1	success	1
the	1	they	1	to	2
top	1	vendor.	1	was	1
what	1	wonder	1	years	1
you	2				

Total Word Count : 64
Distinct Word Count : 55

Hints, suggestions:

- 1) For simplicity, the program assumes that:
 - a) There are no more than 130 distinct words.
 - b) The program is case sensitive. "the" and "The" are two different words.
 - c) Hyphenated words (that span two lines) can be regarded as two different words.
- 2) **Your job**, if you choose to accept, is to rewrite the program, called "*assign7.cpp*" found only on website, using the String2 class, also found on website, instead of C-style char arrays that were used. This will give you some experience *using* a class instead of *writing* a class. Rename program to "hw7.cpp" and **be sure to make changes in comments as appropriate.**
- 3) You should not have to write any new member functions for the String2 class.
- 4) There should not be any change needed in the WriteWords function. Look closely at file assign7.cpp, some places not much to change at all.
- 5) Test program using redirection to read from the files of words.1, words.2, words.4 and words.5. If problems with redirection for Visual Studio, please let me know!!