

## CS 1301 Test Practice Problems 3

The following test practice problems are intended for you to work on using your computer and the IDLE/Python window. They are slightly more difficult than a written test problem, but writing solutions to these problems will give you valuable experience with aspects of programming and python that you may need more practice on.

1. Write a function `countWords( inFileName, outFileName)` that will open a text file for reading (name provided in the `inFileName` parameter as a string). Your function should use a dictionary to count the number of times each unique word appears in the text file. (I.e. the key should be the word, and the value should be the number of times the word appears. Some simple words like “a” or “the” will repeat many times). Once you have finished reading in the file, write a list of all of the words along with the number of times they appeared in the file to the `outFileName` text file, one word per line, with each word followed by the number of times it appeared. (For extra practice, sort the list, so that the most frequent words are printed first).

Hints: Before you put a word into the dictionary, you will need to check to see if it is already in the dictionary, and if so, how many times it has occurred before. The dictionary `.get( key , default_answer)` function can be used to give a default answer of zero if the word is not in the dictionary.