Alperen Degirmenci
CS 205 - HW 1
09/27/2012

Problem 3

For each word in the dictionary, the letters of the word are sorted in alphabetical order. Using a *defaultdict*, a collection of sorted letter sequences and their anagrams is built. The reducer, for each sorted lettter sequence, combines the lists of anagrams and finds out the length of the resultant list. The sorted letter sequence, the number of anagrams, and the list of anagrams is emitted.

Example output:

"AEPRS" [12, ["APERS", "APRES", "ASPER", "PARES", "PARSE", "PEARS", "PRASE", "PRESA", "RAPES", "REAPS", "SPARE", "SPEAR"]]

	Local Machine	Resonance Node	Amazon EMR
P3.py	26.778 s	17.609 s	105.0 s (432 s overall)

Table 1: Running times (in seconds) of P3.py on Local Machine, Resonance Node, and Amazon EMR.