


Find Two-Word Anagramms

Description

This usecase finds all two-word anagrams of the word “documenting” based on a vocabulary provided by file. A two-word anagramm is a combination of two words which can be created from any arrangement of the letters which the word “documenting” is build-up from. Example: The words "document" and "gin" are a two-word anagram of "documenting".

Specification

Read vocabulary		1
The system reads the file with the words of the vocabulary		1.1
Note: There is a file wordlist.txt provided along with this specification which can be used here.		
For every line of the file, the system...		1.2
... splits the line at the word boundaries, made-up from a continuous sequence of blanks and tabulators		1.2.1
... appends all words obtained from the line to the vocabulary		1.2.2
Example: The line Peter Paul Mary contributes the words „Peter“, „Paul“, and „Mary“ to the vocabulary. There is no check for special characters within the words required.		
Less than two words in vocabulary		1.3
Compose and check word pairs		2
The system builds a sorted list of the letters from the word "documenting"		2.1
For every word of the vocabulary the system composes a word pair with all its subsequent other words within the vocabulary.		2.2
Example: A vocabulary of the words ONE, TWO, THREE and FOUR results in the word pairs ONE/TWO, ONE/THREE, ONE/FOUR, TWO/THREE, TWO/FOUR and THREE/FOUR.		
For every word pair the system performs the following steps:		2.3
The system builds a sorted list of letters from the concatenation of both words of the pair in lower case.		2.3.1
	Compare letter lists from steps 2.1 and 2.3.1	2.3.2
	Lists are equal, i.e. the word pair is a two-word anagramm	
	The system adds the word pair to the list of found anagramms.	2.3.2.1
The system publishes the list of found anagramms.		3
Less than two words in vocabulary		1.3
The system cancels the process with an appropriate error message.		1.3.1