**Word Composition Problem**

**Approach:**

A compounded word is a word that can be constructed by combining shorter words found in list.

1. A set, `word\_set`, is created from the list of words. So, the search time can be reduced. Each word in the input and “word\_set” is passed into the “is\_compound()” function.
2. The goal of “is\_compound()” function is to tell whether a word is compounding word or not. This function splits the word into two parts: - prefix and suffix of varying length.
   * 1. If both prefix and suffix parts are present in the “word\_set “ then the word is compounding word, so function returns True. Or,
     2. If prefix part is in “word\_set” and suffix can be further divided into multiple words found in “word\_set”, the function returns True.
3. Else, in all other conditions function will return False.
4. All the compounding words then are stored in a result list.
5. Longest and second longest words are picked from the list and returned with the execution time.