Sequence of Words

You are given a list of words. Write out how much is the longest sequence of words from that list where each word is the same as the previous one with one extra letter at the end.
Note: Empty string is not a word.

The input is between 1 and 1 000 000 words.

Example

Input: someone,one,some,word,someo,someon,extra
Output: 4

Explanation: the longest sequence is some, someo, someon, someone because every word from this sequence is the previous word with 1 extra letter as suffix. Therefore the answer is 4.