**648. Replace Words**

Medium

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In English, we have a concept called **root**, which can be followed by some other word to form another longer word - let's call this word **successor**. For example, when the **root** "an" is followed by the **successor** word "other", we can form a new word "another".

Given a dictionary consisting of many **roots** and a sentence consisting of words separated by spaces, replace all the **successors** in the sentence with the **root** forming it. If a **successor** can be replaced by more than one **root**, replace it with the **root** that has **the shortest length**.

Return *the sentence* after the replacement.

**Example 1:**

**Input:** dictionary = ["cat","bat","rat"], sentence = "the cattle was rattled by the battery"

**Output:** "the cat was rat by the bat"

**Example 2:**

**Input:** dictionary = ["a","b","c"], sentence = "aadsfasf absbs bbab cadsfafs"

**Output:** "a a b c"

**Example 3:**

**Input:** dictionary = ["a", "aa", "aaa", "aaaa"], sentence = "a aa a aaaa aaa aaa aaa aaaaaa bbb baba ababa"

**Output:** "a a a a a a a a bbb baba a"

**Example 4:**

**Input:** dictionary = ["catt","cat","bat","rat"], sentence = "the cattle was rattled by the battery"

**Output:** "the cat was rat by the bat"

**Example 5:**

**Input:** dictionary = ["ac","ab"], sentence = "it is abnormal that this solution is accepted"

**Output:** "it is ab that this solution is ac"

**Constraints:**

* 1 <= dictionary.length <= 1000
* 1 <= dictionary[i].length <= 100
* dictionary[i] consists of only lower-case letters.
* 1 <= sentence.length <= 10^6
* sentence consists of only lower-case letters and spaces.
* The number of words in sentence is in the range [1, 1000]
* The length of each word in sentence is in the range [1, 1000]
* Each two consecutive words in sentence will be separated by exactly one space.
* sentence does not have leading or trailing spaces.

Accepted

67,422

Submissions

115,091