Problem 1451: Rearrange Words in a Sentence

Problem Information

Difficulty: Medium
Acceptance Rate: 66.53%
Paid Only: No
Tags: String, Sorting

Problem Description

Given a sentence `text` (A _sentence_ is a string of space-separated words) in the following format:

* First letter is in upper case. * Each word in `text` are separated by a single space.

Your task is to rearrange the words in text such that all words are rearranged in an increasing order of their lengths. If two words have the same length, arrange them in their original order.

Return the new text following the format shown above.

Example 1:

Input: text = "Leetcode is cool" **Output:** "Is cool leetcode" **Explanation:** There are 3 words, "Leetcode" of length 8, "is" of length 2 and "cool" of length 4. Output is ordered by length and the new first word starts with capital letter.

Example 2:

Input: text = "Keep calm and code on" **Output:** "On and keep calm code" **Explanation:** Output is ordered as follows: "On" 2 letters. "and" 3 letters. "keep" 4 letters in case of tie order by position in original text. "calm" 4 letters. "code" 4 letters.

Example 3:

Input: text = "To be or not to be" **Output:** "To be or to be not"

Constraints:

* `text` begins with a capital letter and then contains lowercase letters and single space between words. * `1 <= text.length <= 10^5`

Code Snippets

C++:

```cpp
class Solution {
public:
string arrangeWords(string text) {


}
};
```

Java:

```java
class Solution {
public String arrangeWords(String text) {


}
}
```

Python3:

```python
class Solution:
def arrangeWords(self, text: str) -> str:
```