Problem 151: Reverse Words in a String

Problem Information

Difficulty: Medium
Acceptance Rate: 54.38%
Paid Only: No
Tags: Two Pointers, String

Problem Description

Given an input string `s`, reverse the order of the **words**.

A **word** is defined as a sequence of non-space characters. The **words** in `s` will be separated by at least one space.

Return _a string of the words in reverse order concatenated by a single space._

Note that `s` may contain leading or trailing spaces or multiple spaces between two words. The returned string should only have a single space separating the words. Do not include any extra spaces.

Example 1:

Input: s = "the sky is blue" **Output:** "blue is sky the"

Example 2:

Input: s = " hello world " **Output:** "world hello" **Explanation:** Your reversed string should not contain leading or trailing spaces.

Example 3:

Input: s = "a good example" **Output:** "example good a" **Explanation:** You need to reduce multiple spaces between two words to a single space in the reversed string.

Constraints:

* `1 <= s.length <= 104` * `s` contains English letters (upper-case and lower-case), digits, and spaces `' '`. * There is **at least one** word in `s`.

Follow-up: **If the string data type is mutable in your language, can you solve it **in-place with `O(1)` extra space?

Code Snippets

C++:

```cpp
class Solution {
public:
string reverseWords(string s) {


}
};
```

Java:

```java
class Solution {
public String reverseWords(String s) {


}
}
```

Python3:

```python
class Solution:
def reverseWords(self, s: str) -> str:
```