

151. Reverse Words in a String

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:

- $1 \leq s.length \leq 10^4$
- `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?

