

151. Reverse Words in a String

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?