# Documentation for the reverseWords function:

## Function Documentation

## Description:

The reverseWords function takes a string s as input and returns a new string where the words in s are reversed in order. The function ensures that the returned string has only single spaces between words and no leading or trailing spaces.

## Parameters:

- documentation for the reverseWords function: A string that contains words separated by spaces. The string may have leading, trailing, or multiple spaces between words.

## Returns:

- **str:** A new string with the words from the input string s reversed in order, separated by a single space, and with no leading or trailing spaces.

### Example 1:

- **Input:** "the sky is blue"
- **Output:** "blue is sky the"
- **Explanation:** The words are reversed, and the result has only single spaces between words.

## Example 2:

- **Input:** "  hello world  "
- **Output:** "world hello"
- **Explanation:** Leading and trailing spaces are removed, and words are reversed with a single space between them.

## Example 3:

- **Input:** "a good   example"
- **Output:** "example good a"
- **Explanation:** Multiple spaces between words are reduced to a single space, and words are reversed.

## Constraints:

- The length of the input string s is between 1 and 10,000 characters.
- The string s contains English letters (both uppercase and lowercase), digits, and spaces.
- There is at least one word in the string s.

## Follow-Up:

- If the string data type is mutable in the language being used, consider solving the problem in-place with O(1) extra space.

## Note:

- The split() method is used to handle multiple spaces and remove extra spaces automatically.
- Reversing the list of words and joining them ensures that the final output meets the requirements of having no extra spaces and words in reverse order.