**557. Reverse Words in a String III: -**

Easy Accepted: 780.8K Submissions: 945.4K Acceptance Rate: 82.6%

Given a string s, reverse the order of characters in each word within a sentence while still preserving whitespace and initial word order.

**Example 1:**

**Input:** s = "Let's take LeetCode contest"

**Output:** "s'teL ekat edoCteeL tsetnoc"

**Example 2:**

**Input:** s = "God Ding"

**Output:** "doG gniD"

**Constraints:**

* 1 <= s.length <= 5 \* 104
* s contains printable **ASCII** characters.
* s does not contain any leading or trailing spaces.
* There is **at least one** word in s.
* All the words in s are separated by a single space.

**Code: -**

class Solution {

public:

    string reverseWords(string s) {

        int n = s.size();

        int i = 0, j = 0;

        while(i < n){

            j = i;

            // find the space or end of the string

            while(j < n and s[j] != ' ')

                ++j;

            reverse(s.begin()+i, s.begin()+j);

            i = j + 1;

        }

        return s;

    }

};

**T.C: - O(N \* k), k = length of word**

**S.C: - O(1)**