unstop | Game of Reversal

Problem | Solution | Submissions

Problem Statement

Alice loves to play games with strings so one day she took a string and started playing **Game of Reversal** with it. In the game she reverses the order of character of every single word in the sentence but maintains the initial word order. She wins the game if she reverses the string in the correct order. Your task is to help Alice in winning the game.

Input Format

- The first line of input data contains a string s which contains only alphabets from 'a'-'z

Output Format

- The output contains a string which has the reversed words but in same order.

Constraints

- 1<=s.length<=5*10^4
- 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.

Sample Testcase 0

Testcase Input

Let's take coding contest

Testcase Output

s'teL ekat gnidoc tsetnoc

Explanation

In the output string the words are in the same order as the original string but they are present in reversed order.

Sample Testcase 1

Testcase Input

God Ding

Testcase Output

doG gniD

Explanation

In this sample test case "God Ding" word God is reversed to "doG" and "Ding" is reversed to "gniD" nut the relative order remained same.

CODE

```
#include <iostream>
#include <sstream>
#include <string>
#include <vector>

using namespace std;

string reverseWords(string s) {
    stringstream ss(s);
    vector<string> words;
    string word, reversed;

    while (ss >> word) {
        for (int i = word.length() - 1; i >= 0; i--) {
            reversed += word[i];
        }
        reversed += ' ';
    }

    // Remove the trailing space
    if (!reversed.empty()) {
        reversed.pop_back();
    }

    return reversed;
}

int main() {
    string s;
    getline(cin, s);

    string reversed = reverseWords(s);
    cout << reversed << endl;

    return 0;
}
```