

Reverse Words In A Sentence II

```
1 class Solution(object):
2     def reverseWords(self, input):
3         """
4         input: string input
5         return: string
6         """
7         # write your solution here
8         if not input:
9             return input
10        array = list(input)
11        end = 0
12        for i in range(len(array)):
13            if array[i] == " " and (i == 0 or array[i - 1] == " "):
14                continue
15            array[end] = array[i]
16            end += 1
17        if end > 0 and array[end - 1] == ' ':
18            end -= 1
19
20        self.reverse(array, 0, end - 1)
21        start = 0
22        for i in range(end):
23            if array[i] != " " and (i == 0 or array[i - 1] == " "):
24                start = i
25            if array[i] != " " and (i == end - 1 or array[i + 1] == " "):
26                self.reverse(array, start, i)
27        return "".join(array[:end])
28
29    def reverse(self, array, left, right):
30        while left < right:
31            array[left], array[right] = array[right], array[left]
32            left += 1
33            right -= 1
34
```