Problem 806: Number of Lines To Write String

Problem Information

Difficulty: Easy
Acceptance Rate: 71.62%
Paid Only: No
Tags: Array, String

Problem Description

You are given a string `s` of lowercase English letters and an array `widths` denoting **how many pixels wide** each lowercase English letter is. Specifically, `widths[0]` is the width of `'a'`, `widths[1]` is the width of `'b'`, and so on.

You are trying to write `s` across several lines, where **each line is no longer than**`100`**pixels**. Starting at the beginning of `s`, write as many letters on the first line such that the total width does not exceed `100` pixels. Then, from where you stopped in `s`, continue writing as many letters as you can on the second line. Continue this process until you have written all of `s`.

Return _an array_`result` _of length 2 where:_

* `result[0]`_is the total number of lines._ * `result[1]`_is the width of the last line in pixels._

Example 1:

Input: widths = [10,10,10,10,10,10,10,10,10,10,10,10,10,10,10,10,10,10,10,10,10,10,10,10,10,10], s = "abcdefghijklmnopqrstuvwxyz" **Output:** [3,60] **Explanation:** You can write s as follows: abcdefghij // 100 pixels wide klmnopqrst // 100 pixels wide uvwxyz // 60 pixels wide There are a total of 3 lines, and the last line is 60 pixels wide.

Example 2:

Input: widths = [4,10,10,10,10,10,10,10,10,10,10,10,10,10,10,10,10,10,10,10,10,10,10,10,10,10], s =

"bbbcccddddaaa" **Output:** [2,4] **Explanation:** You can write s as follows: bbbcccdddaa //
98 pixels wide a // 4 pixels wide There are a total of 2 lines, and the last line is 4 pixels wide.

Constraints:

* `widths.length == 26` * `2 <= widths[i] <= 10` * `1 <= s.length <= 1000` * `s` contains only
lowercase English letters.

Code Snippets

C++:

```
class Solution {
public:
vector<int> numberOfLines(vector<int>& widths, string s) {


}
};
```

Java:

```
class Solution {
public int[] numberOfLines(int[] widths, String s) {


}
}
```

Python3:

```
class Solution:
def numberOfLines(self, widths: List[int], s: str) -> List[int]:
```