

2468. Split Message Based on Limit

Hard



Topics



Hint

You are given a string, `message`, and a positive integer, `limit`.

You must **split** `message` into one or more **parts** based on `limit`. Each resulting part should have the suffix "`<a/b>`", where "`b`" is to be **replaced** with the total number of parts and "`a`" is to be **replaced** with the index of the part, starting from `1` and going up to `b`. Additionally, the length of each resulting part (including its suffix) should be **equal** to `limit`, except for the last part whose length can be **at most** `limit`.

The resulting parts should be formed such that when their suffixes are removed and they are all concatenated **in order**, they should be equal to `message`. Also, the result should contain as few parts as possible.

Return `the parts` `message` *would be split into as an array of strings*. If it is impossible to split `message` as required, return *an empty array*.

Example 1:

Input: `message = "this is really a very awesome message"`, `limit = 9`

Output: `["thi<1/14>", "s i<2/14>", "s r<3/14>", "eal<4/14>", "ly <5/14>", "a v<6/14>", "ery<7/14>", "aw<8/14>", "eso<9/14>", "me<10/14>", "m<11/14>", "es<12/14>", "sa<13/14>", "ge<14/14>"]`

Explanation:

The first 9 parts take 3 characters each from the beginning of `message`.

The next 5 parts take 2 characters each to finish splitting `message`.

In this example, each part, including the last, has length 9.

It can be shown it is not possible to split `message` into less than 14 parts.

Example 2:

Input: `message = "short message"`, `limit = 15`

Output: `["short mess<1/2>", "age<2/2>"]`

Explanation:

Under the given constraints, the string can be split into two parts:

- The first part comprises of the first 10 characters, and has a length 15.
- The next part comprises of the last 3 characters, and has a length 8.

Constraints:

- `1 <= message.length <= 104`
- `message` consists only of lowercase English letters and `' '`.
- `1 <= limit <= 104`

Seen this question in a real interview before? 1/5

Yes No

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Topics



Hint 1

Hint 2

Hint 3

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