

@LeetCode

A string `S` of lowercase letters is given. We want to partition this string into as many parts as possible so that each letter appears in at most one part, and return a list of integers representing the size of these parts.

Example 1:

Input: `S = "ababcbacadefegdehijhklij"`

Output: `[9,7,8]`

Explanation:

The partition is `"ababcbaca"`, `"defegde"`, `"hijhklij"`.

This is a partition so that each letter appears in at most one part.

A partition like `"ababcbacadefegde"`, `"hijhklij"` is incorrect, because it splits `S` into less parts.

Note:

1. `S` will have length in range `[1, 500]`.
2. `S` will consist of lowercase letters ('a' to 'z') only.