763. Partition Labels

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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.

Solution: Keep a note of the last occurrence position (LOP) of each characters. We’ll begin the window processes, add a character to the window and note its LOP. Now, when adding next character, if LOP of that character is greater than already noted LOP, then push the window further to make room for the next character. Keep doing this as long as current processed characcter’s LOP is same as LOP which was being tracked. Once this condition hits, the window ends here.