

2182. Construct String With Repeat Limit

Description

You are given a string `s` and an integer `repeatLimit`. Construct a new string `repeatLimitedString` using the characters of `s` such that no letter appears **more than** `repeatLimit` times **in a row**. You do **not** have to use all characters from `s`.

Return *the lexicographically largest* `repeatLimitedString` *possible*.

A string `a` is **lexicographically larger** than a string `b` if in the first position where `a` and `b` differ, string `a` has a letter that appears later in the alphabet than the corresponding letter in `b`. If the first `min(a.length, b.length)` characters do not differ, then the longer string is the lexicographically larger one.

Example 1:

Input: `s = "cczazcc", repeatLimit = 3`

Output: `"zzcccac"`

Explanation: We use all of the characters from `s` to construct the `repeatLimitedString` `"zzcccac"`.

The letter 'a' appears at most 1 time in a row.

The letter 'c' appears at most 3 times in a row.

The letter 'z' appears at most 2 times in a row.

Hence, no letter appears more than `repeatLimit` times in a row and the string is a valid `repeatLimitedString`.

The string is the lexicographically largest `repeatLimitedString` possible so we return `"zzcccac"`.

Note that the string `"zzcccca"` is lexicographically larger but the letter 'c' appears more than 3 times in a row, so it is not a valid `repeatLimitedString`.

Example 2:

Input: `s = "aababab", repeatLimit = 2`

Output: `"bbabaa"`

Explanation: We use only some of the characters from `s` to construct the `repeatLimitedString` `"bbabaa"`.

The letter 'a' appears at most 2 times in a row.

The letter 'b' appears at most 2 times in a row.

Hence, no letter appears more than `repeatLimit` times in a row and the string is a valid `repeatLimitedString`.

The string is the lexicographically largest `repeatLimitedString` possible so we return `"bbabaa"`.

Note that the string `"bbabaaa"` is lexicographically larger but the letter 'a' appears more than 2 times in a row, so it is not a valid `repeatLimitedString`.

Constraints:

- `1 <= repeatLimit <= s.length <= 105`
- `s` consists of lowercase English letters.

