



## 6014. Construct String With Repeat Limit

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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.

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Medium

### 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

### 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

### Constraints:

- $1 \leq \text{repeatLimit} \leq s.length \leq 10^5$
- `s` consists of lowercase English letters.

JavaScript



```
1 const ord = (c) => c.charCodeAt();
2
```

```


3  const repeatLimitedString = (s, limit) => {
4      let f = Array(26).fill(0), res = '';
5      for (const c of s) f[ord(c) - 97]++;
6  for (let i = 25; ~i; i--) {
7      if (f[i] == 0) continue;
8      let c = String.fromCharCode(97 + i);
9  while (f[i] > limit) {
10         res += c.repeat(limit);
11         f[i] -= limit;
12         let findBridge = false, bridge, j;
13     for (j = 25; ~j; j--) { // append second larger
14         if (j == i) continue;
15         if (f[j] > 0) {
16             findBridge = true;
17             bridge = String.fromCharCode(97 + j);
18             break;
19         }
20     }
21     if (!findBridge) return res;
22     // pr(111, res, bridge)
23     res += bridge;
24     f[j]--;
25 }
26     res += c.repeat(f[i]);
27     f[i] = 0;
28     // pr(c, res)
29 }
30 return res;
31 };

```

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