

2434. Using a Robot to Print the Lexicographically Smallest String

Solved 

Medium

Topics

Companies

Hint

You are given a string `s` and a robot that currently holds an empty string `t`. Apply one of the following operations until `s` and `t` are both empty:

- Remove the **first** character of a string `s` and give it to the robot. The robot will append this character to the string `t`.
- Remove the **last** character of a string `t` and give it to the robot. The robot will write this character on paper.

Return the *lexicographically smallest string that can be written on the paper*.

Constraints:

- $1 \leq s.length \leq 10^5$
- `s` consists of only English lowercase letters.

Python3 • Auto

```
1 class Solution:
2     def robotWithString(self, s: str) -> str:
3         count = Counter(s)
4         print(count)
5
6         stack = [] # t
7         res = []
8         minC = 'a'
9         for c in s:
10            stack.append(c)
11            count[c] -= 1
12            while minC != 'z' and count[minC] == 0:
13                minC = chr(ord(minC) + 1)
14            while stack and stack[-1] <= minC:
15                res.append(stack.pop())
16
17         return ''.join(res)
18
```

'abcbzza' -> 'aazzbcb'

will pop all the minChar first, not about making decision between op1 and op2