24. You are given a string s. Consider performing the following operation until s becomes empty: For every alphabet character from 'a' to 'z', remove the first occurrence of that character in s (if it exists). For example, let initially s = "aabcbbca". We do the following operations: Remove the underlined characters s = "aabcbbca". The resulting string is s = "abbca". Remove the underlined characters s = "abbca". The resulting string is s = "ba". Remove the underlined characters s = "ba". The resulting string is s = "". Return the value of the string s right before applying the last operation. In the example above, answer is "ba".

```
def last_remaining_string(s):
    while s:
        prev_s = s
        for char in 'abcdefghijklmnopqrstuvwxyz':
            s = s.replace(char, '', 1)
        if not s:
            return prev_s
s = "aabcbbca"
print(last_remaining_string(s))
```

INPUT:aabcbbca

TIME COMPLEXITY:

O(n^2)

OUTPUT: