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". Given an integer array nums, find the subarray with the largest sum, and return its sum.

Example 1:

Input: nums = [-2,1,-3,4,-1,2,1,-5,4]

Output: 6

Explanation: The subarray [4,-1,2,1] has the largest sum 6.

PROGRAM:

```
def valueBeforeLastOperation(s):
    last_occurrence = {}  # Dictionary to store the last occurrence index of each character
    for i, char in enumerate(s):
        last_occurrence[char] = i
    min_last_occurrence = min(last_occurrence.values())
    return s[:min_last_occurrence]
s = "aabcbbca"
print(valueBeforeLastOperation(s))
```

OUTPUT:

```
aabcb
```

TIME COMPLEXITY: O(n)