

38. Count and Say

Hint

The `count-and-say` sequence is a sequence of digit strings defined by the recursive formula:

`countAndSay(1) = "1"`

`countAndSay(n)` is the way you would "say" the digit string from `countAndSay(n-1)`, which is then converted into a different digit string.

To determine how you "say" a digit string, split it into the `minimal` number of substrings such that each substring contains exactly `one` unique digit. Then for each substring, say the number of digits, then say the digit. Finally, concatenate every said digit.

For example, the saying and conversion for digit string "3322251":

"3322251"
two 3's, three 2's, one 5, and one 1
2 3 + 3 2 + 1 5 + 1 1
"23321511"

Given a positive integer `n`, return `the nth term of the count-and-say sequence`.

Example 1:

Input: `n = 1`

Output: "1"

Explanation: This is the base case.

Example 2:**Input:** n = 4**Output:** "1211"**Explanation:**

countAndSay(1) = "1"

countAndSay(2) = say "1" = one 1 = "11"

countAndSay(3) = say "11" = two 1's = "21"

countAndSay(4) = say "21" = one 2 + one 1 = "12" + "11" = "1211"

Constraints:

$1 \leq n \leq 30$