

38. Count and Say

Description

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 <= n <= 30`

