# Count and Say

This problem requires building each term of the sequence by describing the previous term using run-length encoding.

## Key Idea:

1. Base case: countAndSay(1) = "1"
2. Recursive / Iterative step:
   Generate the next term by counting consecutive identical digits in the current term.
3. Run-Length Encoding logic:
   For string "3322251" → output "23321511":
   - 33 → "23"
   - 22 → "32"
   - 5 → "15"
   - 1 → "11"

## Iterative Solution (Optimal):

Algorithm:
1. Start with "1"
2. Repeat n-1 times:
   - Scan the current string.
   - Count consecutive characters.
   - Append count + char to next string.
3. Return the final string.

## Complexity:

- Time: O(n×m) (where m is length of term, grows roughly 1.3x each step).
- Space: O(m) (string building each step).