Count and Say

The count-and-say sequence is the sequence of integers beginning as follows:
`1, 11, 21, 1211, 111221, ...`

`1` is read off as `"one 1"` or `11`.
`11` is read off as `"two 1s"` or `21`.
`21` is read off as `"one 2`, then `one 1"` or `1211`.

Given an integer n, generate the n^{th} sequence.

Note: The sequence of integers will be represented as a string.

Solution 1

It seems not only me misunderstood the question. Please modify the description, since it's frustrating if you are solving a "different" question. Thanks.

written by boa1150 original link here

Solution 2

At the beginning, I got confusions about what is the nth sequence. Well, my solution is accepted now, so I'm going to give some examples of nth sequence here. The following are sequence from n=1 to n=10:

```
1.     1
2.     11
3.     21
4.     1211
5.     111221
6.     312211
7.     13112221
8.     1113213211
9.     31131211131221
10.   13211311123113112211
```

From the examples you can see, the (i+1)th sequence is the "count and say" of the ith sequence!

Hope this helps!

written by xin15 original link here

Solution 3

Because usually we start from the 0 th item, so add this description to avoid misunderstanding.

written by yuyibestman original link here