Primitive Recursive → a function that can be computed using for loops.

A(2,2) → Consider final two m, n in each step for A(2,2)

(2,1) — 2 functions at play: 1st and 2nd digit are independent.

Start → 20

2x1's: 11, 10 — start

2x0's: 01, 02

4x1's: 13 ←, 12, 11, 10

4x0's: 01, 02, 03, 04

6x1's: 15 ←, 14, 13, 12, 11, 10

6x0's: 01, 02, 03, 04, 05, 06, 07 ←

The m position alternates by an additive of 2 between 1's and 0's

The n position rises and falls from 1 to an Odd incrementing number, back to Zero.

This Seems Recursible

28 Steps from A(2,2) to A(0,7) → 7

$$A(m,n) = \begin{cases} n+1 \\ A(m-1,1) \\ A(m-1, A(m,n-1)) \end{cases}$$

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