

L62

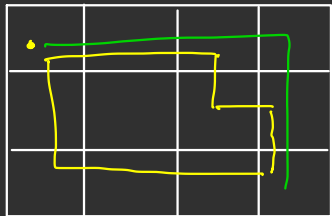
Dynamic Programming : Classical Problems 1

Join Discord - <https://bit.ly/ly-discord>

RECAP

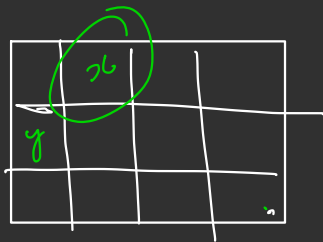
Let's dive right into it

1. Unique Paths



R R R D D
 R R D R D
 D D R R R

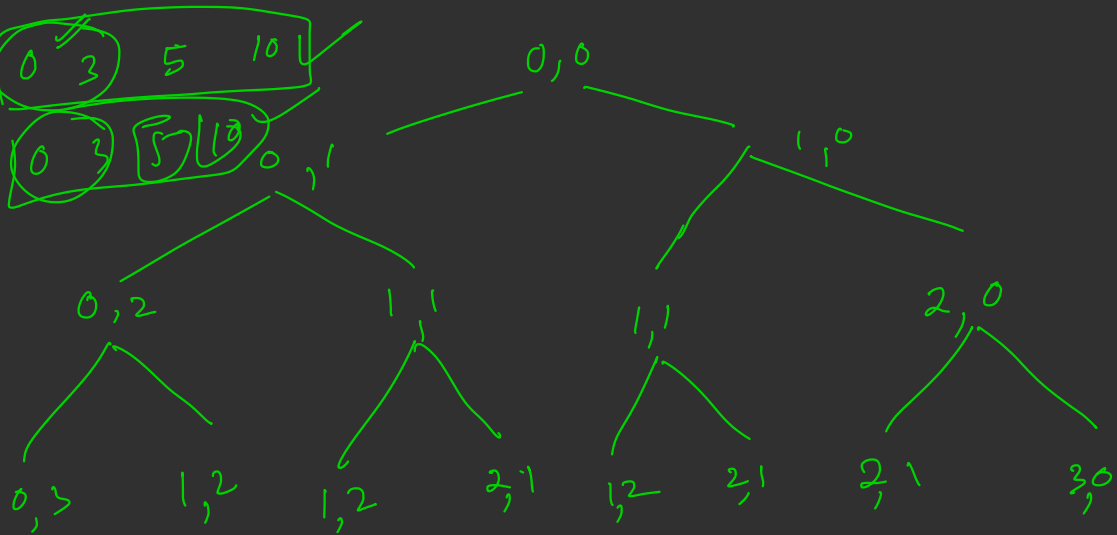
Intuition



$f(i, j, m, n)$
 $f(0, 0, 3, 4)$

$x = f(0, 1, 3, 4)$
 $y = f(1, 0, 3, 4)$

Solution



Let's implement

				6
				0
				0
				0
0	0	0	0	

$p[m+1][n+1]$

A follow-up to
Unique Paths

2. 0/1 Knapsack

Intuition

Solution

Let's implement

a b ⁱc d e f g h i

^ja c x d e f h i

3. Longest Common Subsequence

$f(i, j)$

$$ans = 1 + f(i+1, j+1)$$

Intuition

Solution

Let's implement

Thank You!

Reminder: Going to the gym & observing the trainer work out can help you know the right technique, but you'll muscle up only if you lift some weights yourself.

So, PRACTICE, PRACTICE, PRACTICE!