

7. let $dp[i, j]$ be max # of coins

$$dp[i, j] = c[i, j] + \max(dp[i-1, j], dp[i, j-1])$$

base case: $i=0$ or $j=0$, $dp[i, j] = c[i, j]$

there n^2 subproblems, each take $O(1)$ time to solve.

$\therefore O(n^2)$ is running time