

Dynamic Programming Practice

You are given an n -by- n grid, where each square (i, j) contains $c(i, j)$ gold coins. Assume that $c(i, j) \geq 0$ for all squares. You must start in the upper-left corner and end in the lower-right corner, and at each step you can only travel one square **down** or **right**. When you visit any square, including your starting or ending square, you may collect all of the coins on that square.

Design an algorithm the maximum number of coins that it is possible to collect and end. Assume that you have the dimension of grid and $c(i, j)$ for all square (i, j)