

A.

Base case: $T(m,n) = 1$ if $m = 0$ or $n = 0$

$$T(x, y) = O(1) + T(m - 1, n) + T(m, n-1) \leq 2T(n - 1)$$

Time complexity: $O(2^n)$

B.

Base case: $T(m,n) = 1$ if $m = 0$ or $n = 0$

Time complexity: $O(m*n)$