$$T(n) = \begin{cases} C_1 & \text{khi } n = 0 \\ T(n-1) + n + C_2 & \text{khi } n > 0 \end{cases}$$

$$T(n) = T(n-1) + n + C_2$$

$$= \left[T(n-2) + n - 1 + C_2\right] + n + C_2 = T(n-2) + 2n + 2C_2 - 1$$

$$= \left[T(n-3) + n - 2 + C_2\right] + 2n + 2C_2 - 1 = T(n-3) + 3n + 3C_2 - 1 - 2$$

...

$$= T(n-i) + in + iC_2 - \sum_{k=0}^{i-1} k$$

Quá trình kết thúc khi $n - i = 0 \Leftrightarrow i = n$

$$\Rightarrow T(n) = T(0) + n^2 + nC_2 - \frac{(n-1)n}{2}$$

$$= C_1 + n^2 + nC_2 - \frac{n^2 - n}{2}$$

$$= \frac{n^2}{2} + \frac{2C_2 + 1}{2} n + C_1$$