

$$\begin{aligned}
& T(n) = T(n-1) + (n+1) \\
& = T(n-2) + n + (n+1) \\
& = T(n-3) + (n-1) + n + (n+1) \\
& \dots \\
& = T(1) + 3 + 4 + \dots + (n-1) + n + (n+1) \\
& = T(0) + 2 + 3 + \dots + n + (n+1) \\
& \text{Założenie } T(0) = 0 \\
& = 2 + 3 + \dots + n + (n+1) = \frac{(2+(n+1))n}{2} = \frac{1}{2}n^2 + \frac{3}{2}n = O(n^2)
\end{aligned}$$