

Ej. 3

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Hay caso mejor y peor? Sí

Caso mejor: $\text{pal}[n] \neq \text{pal}[1]$

$$n = \text{ult} - \text{pri}$$

Se ejecuta el for y un return

$$\sum_{i=\text{pri}}^{\text{ult}} 1 = \text{ult} - \text{pri} + 1 = n \in \Omega(n)$$

Caso peor $\text{pal}[\text{pri}] = \text{pal}[\text{ult}] \forall \text{pal}$

$$T(n) = \begin{cases} 1 & n \leq 1 \\ n + T(n-2) & n > 1 \end{cases}$$

$$k=1 \quad n + T(n-2)$$

$$k=2 \quad n + n-2 + T(n-4)$$

$$k=3 \quad n + n-2 + n-4 + T(n-6)$$

$$k=4 \quad n + n-2 + n-4 + n-6 + T(n-8)$$

$$\sum_{i=0}^k n-2i + 1$$

$$n-2k = 1$$

$$k = \frac{n-1}{2}$$

$$\sum_{i=0}^{n/2} n-2i + 1 = \left(\frac{n}{2} - 0 + 1 \right) \cdot \frac{(n-2 \cdot \frac{n}{2}) + 1}{2} + 1$$

$$\left(\frac{n}{2} + 1 \right) \cdot \frac{n}{2} \in \Theta(n^2)$$