Ej 3. ADAM ROY FREDERICK WILLIAM READING Y2483358Q

```
bool palind(string& pal, int pri, int ult){
    if(pri >= ult)
        return true;
    else
        return pal[pri] == pal[ult] and
               palind(pal, pri+1, ult-1);
}
```

talla: problema = ult - pri + 1 = n

mejor caso pal[pri] ≠ pal[ult] = $\Omega(1)$

peor caso (n-2)

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

$$T(n) = \underbrace{T(n-2)+1}_{i=1} \Rightarrow \underbrace{[T(n-4)+1]+1}_{i=2} = \underbrace{[T(n-6)+1]+1+1}_{i=3}$$

$$= T(n-2i) + i \qquad T(1) = \frac{n-1}{2} = 1 + \frac{n-1}{2} \in O(n)$$

$\hookrightarrow n-2i$

$n-2i = 1$

$\hookrightarrow i = \frac{n-1}{2}$