$$k_{i-1} + 1 = k_i \qquad 2k_i = s_i$$

$$s_{i-1} = s_i$$

$$t_i + \Phi(T_i) - \Phi(T_{i-1})$$

$$= 1 + 2k_i - s_i - s_{i-1}/2 + k_{i-1}$$

$$= 1 + s_i - s_i - s_i/2 + s_i/2 - 1$$

$$= 0$$

$$(1) \quad n \cdot T(n) = 2 \sum_{k=0}^{n-1} T(k) + c \cdot n^2$$

$$(2) \quad (n-1) \cdot T(n-1) = 2 \sum_{k=0}^{n-2} T(k) + c \cdot (n-1)^2$$

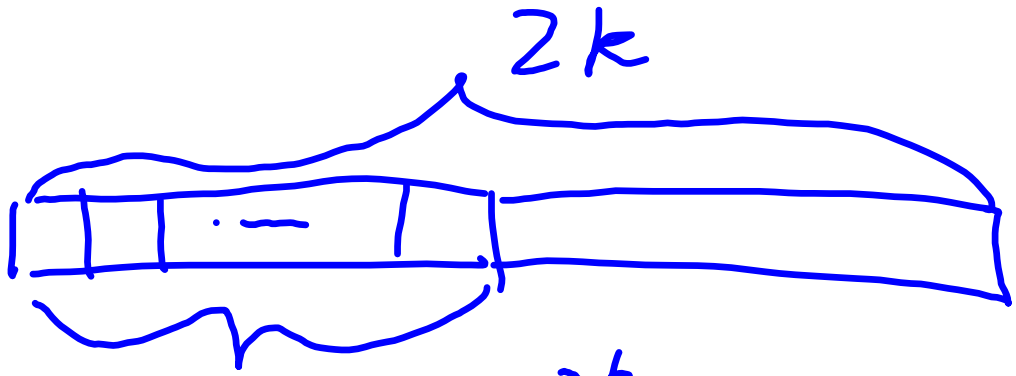
$$\sum_{i=1}^{n} \frac{1}{i}$$

$$n \cdot T(n) - (n-1) T(n-1)$$

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

$$n \cdot T(n) - (n+1) T(n-1) = 2cn$$

$$\frac{T(n)}{n+1} = \frac{T(n-1)}{n} + \frac{2cn}{n \cdot (n+1)}$$



$O(\underline{n}) \xrightarrow{2^{2k}} O(n^2)$

a^n

PK

PrK