

1. Recurrence relation of SELECT with PARTITION is as follows

$$\begin{array}{ll} T(n) \leq c & \text{when } n < 50 \\ T(n) \leq T(n/5) + T(3n/4) + cn & \text{when } n \geq 50 \end{array}$$

Proof by induction on n that $T(n) \leq an$:

2. In randomized algorithm, randomness imposed on (select: A or B)

- a. as component of the algorithm
- b. in the input of the algorithm