1. Recurrence relation of SELECT with PARTITION is as follows

\[ T(n) \leq c \quad \text{when } n < 50 \]
\[ T(n) \leq T(n/5) + T(3n/4) + cn \quad \text{when } n \geq 50 \]

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