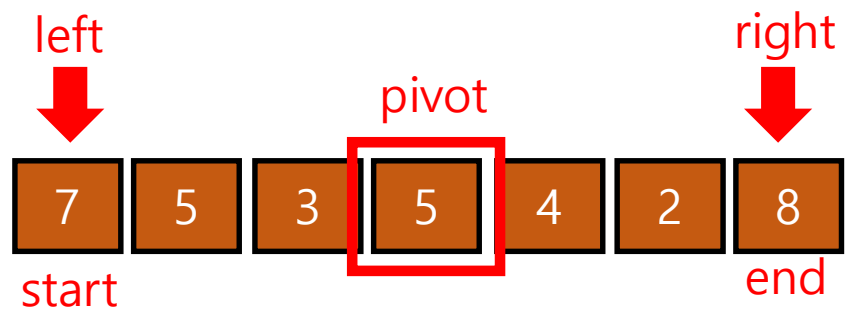
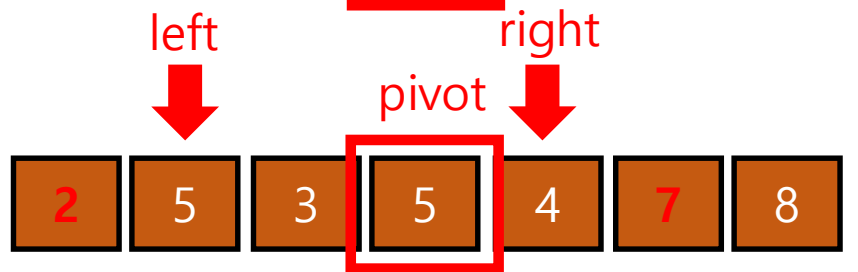
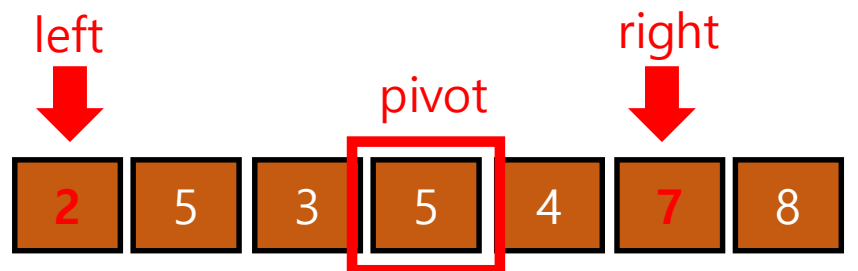
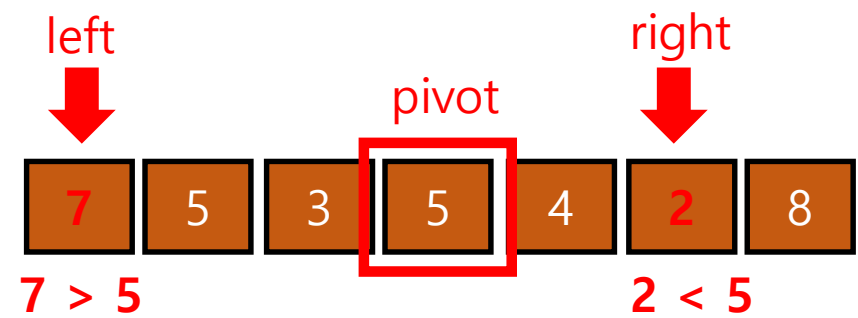
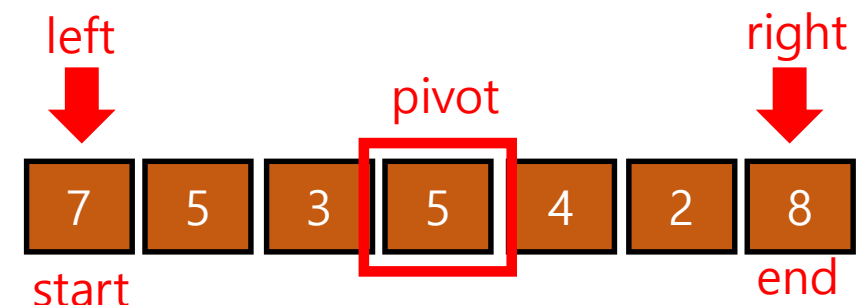
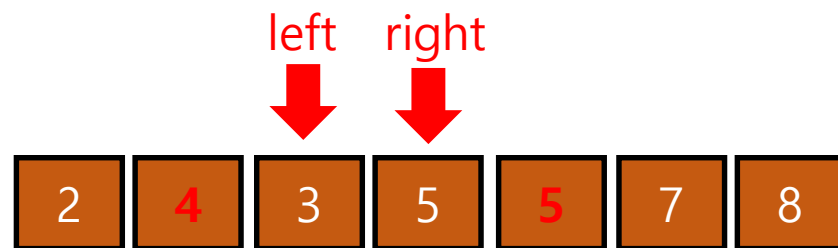
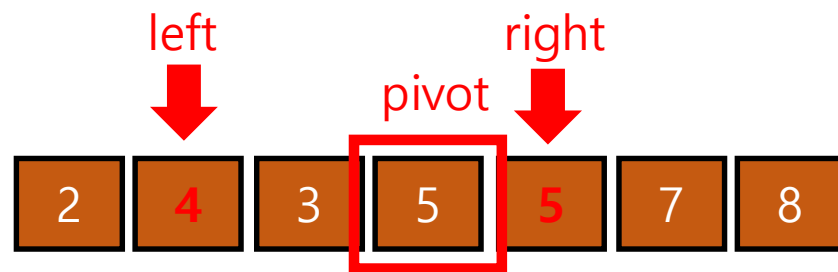
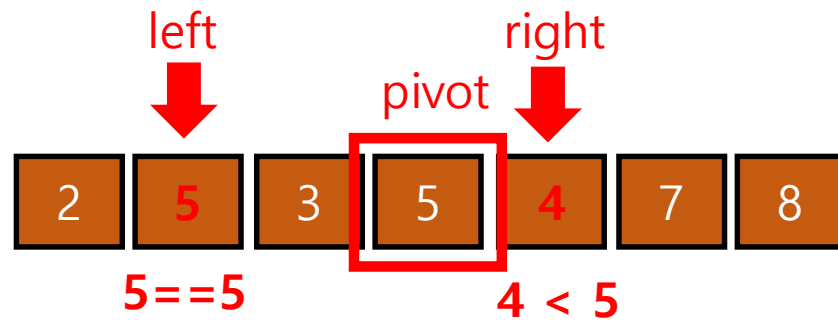
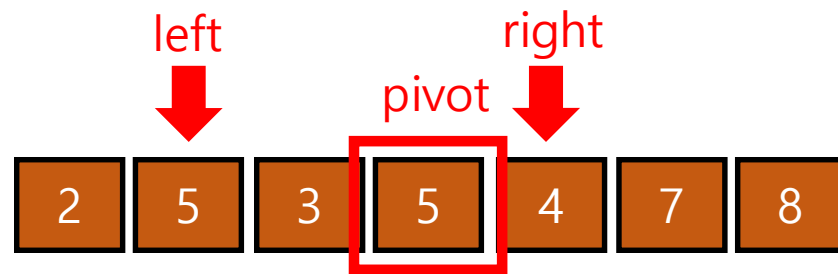


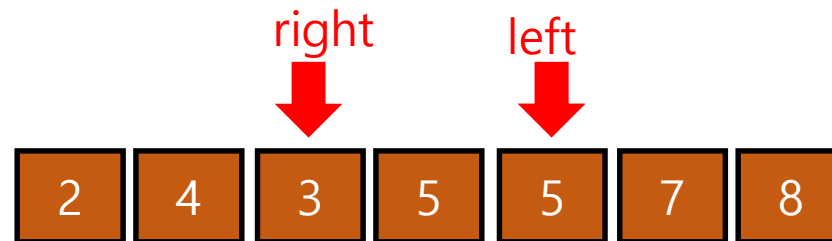
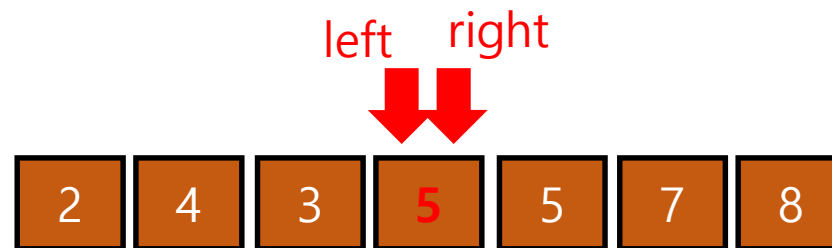
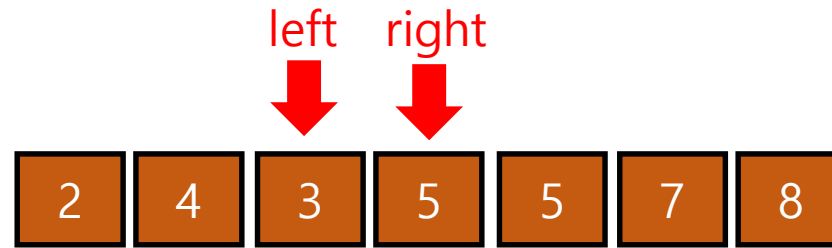
# Data structure

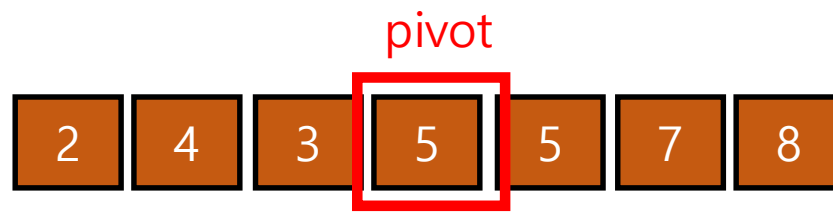
Quick sort

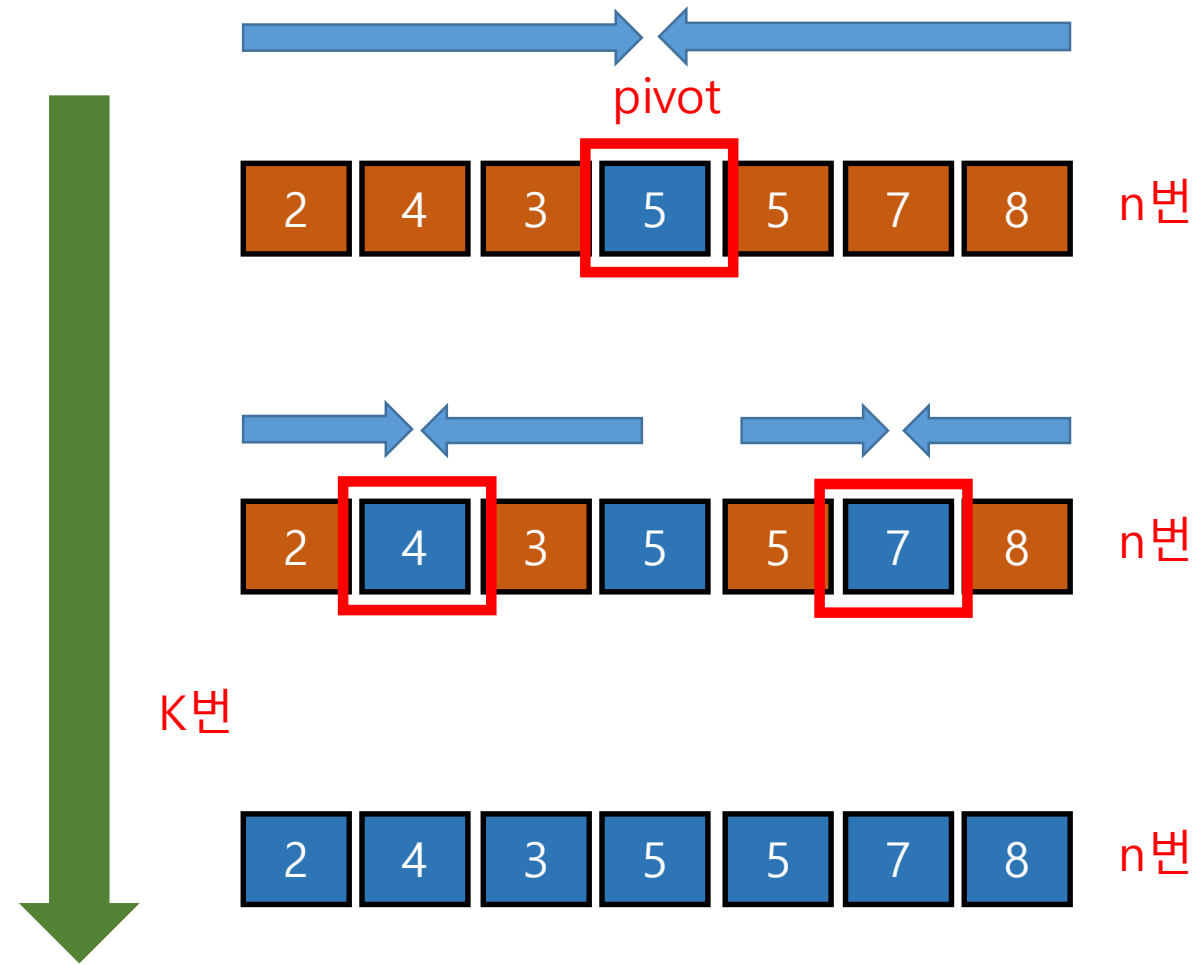












$$T(n) = n * k$$

$$n * \left(\frac{1}{2}\right)^k = 1 \quad \longrightarrow \quad k = \log_2 n$$

$$T(n) = n * \log_2 n$$

$$O(n * \log n)$$