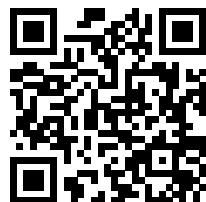




SoulShift - Educational Q&A Platform

General Questions

Practice Questions



Q1. What is the average-case time complexity of quicksort?

- A. $O(n)$
- B. $O(n \log n)$
- C. $O(n^2)$
- D. $O(\log n)$

Solution: The average-case time complexity of quicksort is $O(n \log n)$ due to the divide-and-conquer approach.

Q2. What is the time complexity of searching for an element in a hash table?

- A. $O(1)$
- B. $O(n)$
- C. $O(\log n)$
- D. $O(n \log n)$

Solution: In an ideal hash table with no collisions, searching for an element can be done in constant time $O(1)$.



