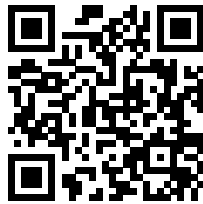




SoulShift - Educational Q&A Platform

General Questions

Practice Questions



Q1. What is the time complexity of enqueueing an element in a queue implemented using a linked list?

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

Solution: Enqueueing an element in a queue implemented with a linked list is done in constant time, $O(1)$, as it involves adding to the tail of the list.

Q2. What is the time complexity of performing a binary search on a sorted array?

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

Solution: Binary search has a time complexity of $O(\log n)$ because it repeatedly divides the search interval in half.



