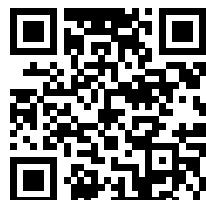




## **SoulShift - Educational Q&A Platform**

### **General Questions**

Practice Questions



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**Q1. Which data structure allows insertion and deletion from both ends?**

- A. Stack
- B. Queue
- C. Deque
- D. Array

*Solution: A Deque (Double-ended queue) allows insertion and deletion from both the front and the back.*

**Q2. What is the time complexity of deleting a node from a singly linked list given a pointer to that node?**

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

*Solution: If you have a pointer to the node to be deleted, you can delete it in  $O(1)$  time by copying the next node's data.*



