



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

### **General Questions**

Practice Questions



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**Q1. What is the space complexity of a queue implemented using a linked list?**

- A.  $O(1)$
- B.  $O(n)$
- C.  $O(\log n)$
- D.  $O(n^2)$

*Solution: The space complexity of a queue implemented using a linked list is  $O(n)$ , where  $n$  is the number of elements in the queue.*

**Q2. What is the time complexity of finding the maximum element in a binary heap?**

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

*Solution: Finding the maximum element in a binary max-heap can be done in constant time, hence  $O(1)$ .*



