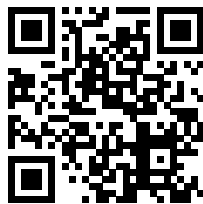




# **SoulShift - Educational Q&A Platform**

## **General Questions**

Practice Questions



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**Q1. If the array has 16 elements, how many comparisons will binary search make in the worst case?**

- A. 4
- B. 5
- C. 16
- D. 8

*Solution: In the worst case, binary search will make  $\log_2(16) = 4$  comparisons.*

**Q2. If a binary search algorithm is implemented recursively, what is its space complexity due to recursion?**

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

*Solution: The space complexity of a recursive binary search is  $O(\log n)$  due to the call stack.*



