SoulShift

SoulShift – Educational Q&A Platform

General Questions

Practice Questions

Q1. What is the maximum number of iterations needed to find an element in an array of size 32 using binary search?

A. 5
B. 6
C. 7
D. 8

Solution: The maximum number of iterations is log2(32) = 5, but since we count from 0, it can take up to 6 iterations.

Q2. If the binary search algorithm is implemented recursively, what is the 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.