SoulShift

SoulShift – Educational Q&A Platform

General Questions

Practice Questions

Q1. Which property must a Red-Black Tree satisfy?

A. Every node is either red or black
B. The root must be red
C. All leaves must be red
D. Every red node must have two black children

Solution: In a Red-Black Tree, every node must be either red or black, which helps maintain balance.

Q2. What is the time complexity of performing a level-order traversal on a Red-Black Tree?

A. O(n)
B. O(log n)
C. O(n log n)
D. O(1)

Solution: A level-order traversal of a Red-Black Tree visits each node once, resulting in a time complexity of O(n).