SoulShift

SoulShift – Educational Q&A Platform

General Questions

Practice Questions

Q1. How do you perform a left rotation in an AVL tree?

A. By moving the right child up and the current node down.
B. By moving the left child up and the current node down.
C. By swapping the current node with its parent.
D. By reversing the tree structure.

Solution: A left rotation involves moving the right child of a node up to take its place, while the current node becomes the left child of the new root.

Q2. What is the main advantage of using Red-Black trees over AVL trees?

A. Faster search times.
B. Less strict balancing, leading to faster insertions and deletions.
C. Easier implementation.
D. More memory usage.

Solution: Red-Black trees allow for less strict balancing compared to AVL trees, which can lead to faster insertions and deletions.