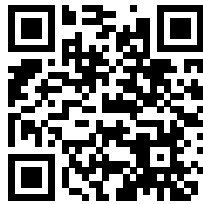




# **SoulShift - Educational Q&A Platform**

## **General Questions**

Practice Questions



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**Q1. Which of the following is a valid sequence of colors for a Red-Black tree?**

- A. Red, Red, Black
- B. Black, Red, Black
- C. Red, Black, Red
- D. Black, Black, Red

*Solution: The sequence Black, Red, Black is valid as it adheres to the Red-Black tree properties.*

**Q2. Which operation is guaranteed to take  $O(\log n)$  time in a Red-Black tree?**

- A. Insertion
- B. Deletion
- C. Search
- D. All of the above

*Solution: All of the operations: insertion, deletion, and search are guaranteed to take  $O(\log n)$  time in a Red-Black tree.*



