

RED-BLACK TREES : Guided Exercises

1. Retrieve the deletion algorithm for a Red-Black tree using a stack.
2. Provide the insertion algorithm for a Red-Black tree using the Parent operation instead of a stack.
3. Provide the deletion algorithm for a Red-Black tree using the Parent operation instead of a stack.
4. Transform an AVL tree into a Red-Black tree.
5. Transform a Red-Black tree into an AVL tree.
6. A 2-3 tree can be transformed into a Red-Black tree, where a black node cannot have two red children. Such a tree is called a "Left or Right Leaning Red-Black Tree." Provide the insertion and deletion algorithms for such a tree.
7. Provide the algorithm to construct a right-threaded Red-Black tree.