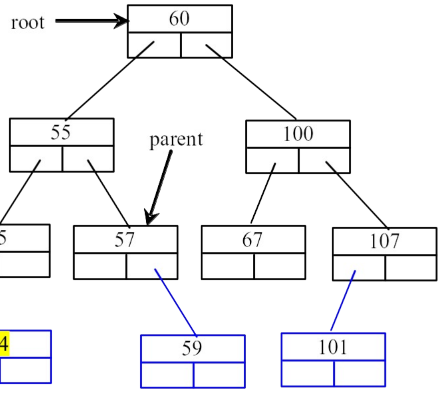
Chapter 19 Binary Search Trees

1.



2. Inorder: A F G M R T

   Preorder: G F A R M T

   Postorder: A F M T R G

3. If a set of the same elements is inserted into a binary tree in two different orders, will the two corresponding binary trees look the same? No. Will the inorder traversal be the same? Yes. Will the postorder traversal be the same? No. Will the preorder traversal be the same? No.

4

The time complexity of inserting an element to a binary tree is O(n).

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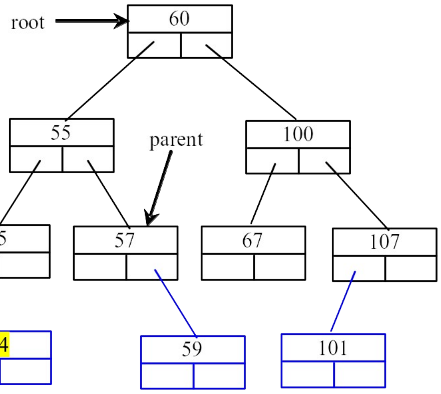

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Preorder: G F A R M T

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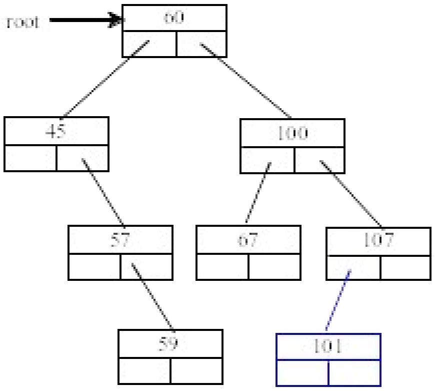
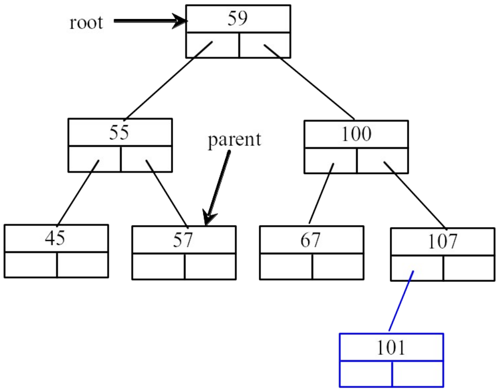


6.



7. The time complexity of deleting an element from a binary tree is O(n).

8. No. Consider the case when current is parentOfRightMost and current.left is rightMost. You have to assign rightMost.left to parentOfRightMost.left.

9. Yes