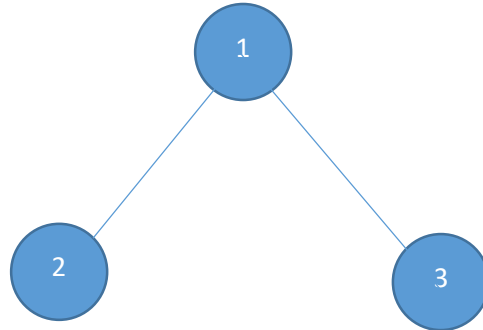


Binary Tree Notes

Basic traversal operations:



Pre-order: VLR. Under preorder traversal, the root labeled 1, is visited first. Then the traversal moves to the left subtree. The left subtree contains only the node labeled 2, and it is visited second. Then preorder traversal moves to the right subtree of the root, finally visiting the node labeled 3. Thus preorder traversal visits the nodes in the order 1,2,3.

In-order: LVR. Before the root node is visited under the in-order traversal, we must traverse its left subtree. The node labeled 2 is visited first. This is the only node in the left subtree of the root, so the traversal moves to the root labeled 1, next and finally to the right subtree. The in-order traversal visits the nodes in this order 2,1,3.

Post-order: LRV. With post-order traversal, we must traverse both the left and right subtrees before visiting the root. We first go to the left subtree, which contains only the node labeled 2, and it is visited first. Next we traverse the right subtree visiting the node labeled 3, and finally, the root node labeled 1. The post-order traversal results in 2,3,1.