07 - Binary Search Trees

Trees

Binary Tree

Binary Search Tree
Binary tree where everything in left subtree is smaller, right is bigger

Balanced Binary Search Tree
In order, Preorder, Postorder Walks

```java
void treeWalk(Node x) {
    if (x == null) return;
    treeWalk(x.left);
    treeWalk(x.right);
    print(x.value);
}
```
Search, Min, Max, Successor
Insert, Delete

Insert 3
Insert 39
Delete 49
Delete 34

Is delete commutative?
A tree is balanced if \( h = O(\log n) \)