



## **BST Remove**

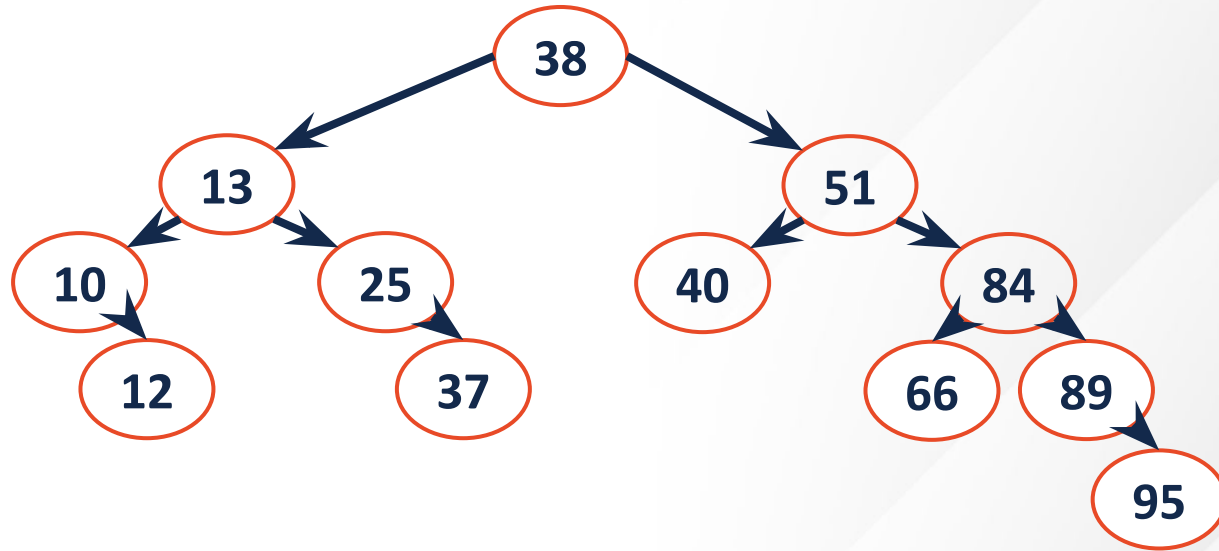
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# Learning Objectives

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1. Implement the BST Remove Algorithm





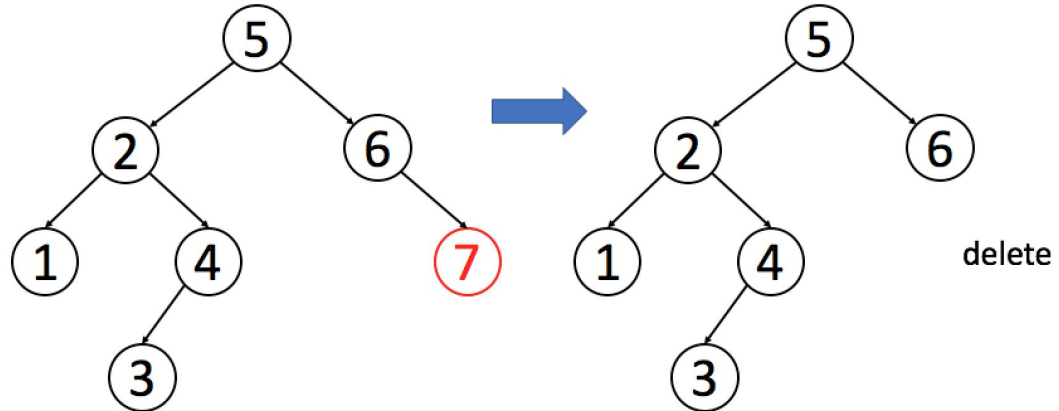
# Remove

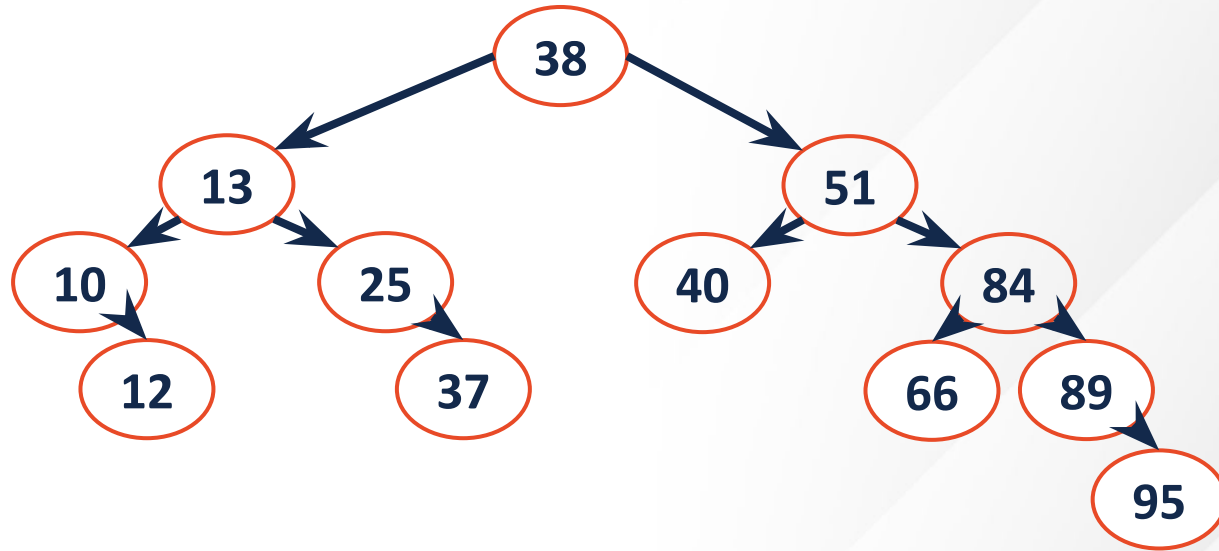
## Case 1 (No child):

1. Find the target node (passed as a reference to the parent's pointer)
2. Delete the node
3. Set child pointer of parent to NULL

Delete 7

Case 1: No Child



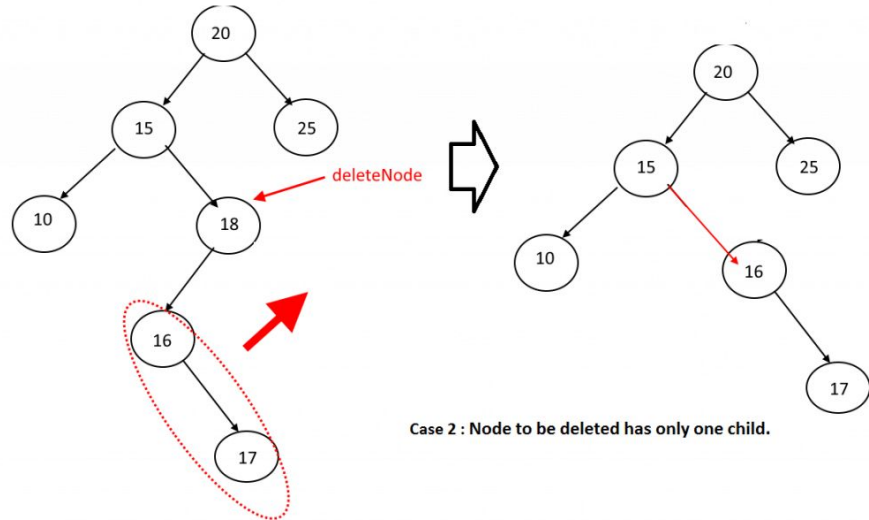


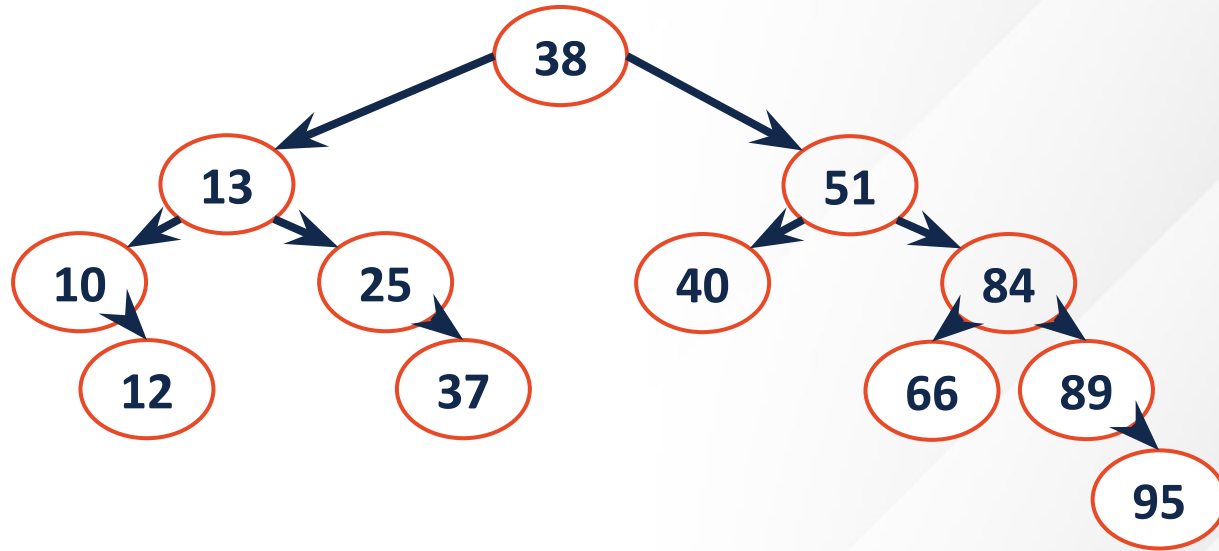
# Remove

## Case 2 (1 child):

1. Find the target node (passed as a reference to the parent's pointer)
2. Make a temporary pointer to the target
3. Set the parent's node to the target's child
4. Delete the target

Delete 18





# Remove

## Case 3 (2 children):

1. Find the target node (passed as a reference to the parent's pointer)
2. Find the target's In Order Predecessor (IOP)
3. Swap the target with the IOP
4. Recursively call on the target's new location

