450. Delete Node in a BST

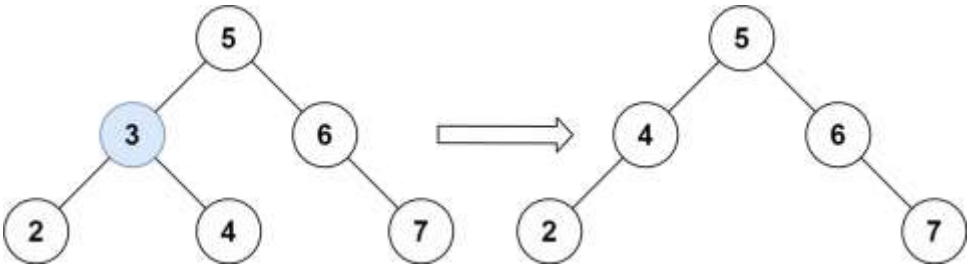
Given a root node reference of a BST and a key, delete the node with the given key in the BST. Return the root node reference (possibly updated) of the BST.

Basically, the deletion can be divided into two stages:

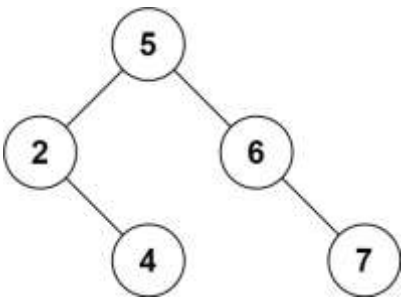
Search for a node to remove.

If the node is found, delete the node.

Example 1:



- **Input:** root = [5,3,6,2,4,null,7], key = 3
- **Output:** [5,4,6,2,null,null,7]
- **Explanation:** Given key to delete is 3. So we find the node with value 3 and delete it.
  - One valid answer is [5,4,6,2,null,null,7], shown in the above BST.
  - Please notice that another valid answer is [5,2,6,null,4,null,7] and it's also accepted.



Example 2:

- **Input:** root = [5,3,6,2,4,null,7], key = 0
- **Output:** [5,3,6,2,4,null,7]
- **Explanation:** The tree does not contain a node with value = 0.

Example 3:

- **Input:** root = [], key = 0
- **Output:** []

Constraints:

- The number of nodes in the tree is in the range [0, 10^4].
- -10^5 <= Node.val <= 10^5
- Each node has a unique value.
- root is a valid binary search tree.
- -10^5 <= key <= 10^5

Follow up: Could you solve it with time complexity O(height of tree)?