# 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.

## SOLUTION IN JAVA

class Solution {

public TreeNode deleteNode(TreeNode root, int key) {

if (root == null)

return null;

if (root.val == key) {

if (root.left == null)

return root.right;

if (root.right == null)

return root.left;

TreeNode minNode = getMin(root.right);

root.right = deleteNode(root.right, minNode.val);

minNode.left = root.left;

minNode.right = root.right;

root = minNode;

} else if (root.val < key) {

root.right = deleteNode(root.right, key);

} else { // root.val > key

root.left = deleteNode(root.left, key);

}

return root;

}

private TreeNode getMin(TreeNode node) {

while (node.left != null)

node = node.left;

return node;

}

}