

111. Minimum Depth of Binary Tree

Description

Hints

Submissions

Discuss

Solution

Pick One

Given a binary tree, find its minimum depth.

The minimum depth is the number of nodes along the shortest path from the root node down to the nearest leaf node.

Note: A leaf is a node with no children.

Example:

Given binary tree `[3,9,20,null,null,15,7]`,

```
    3
   / \
  9  20
 /  \
15   7
```

return its minimum depth = 2.

```
public class L111 {

    public class TreeNode {
        int val;
        TreeNode left;
        TreeNode right;
        public TreeNode(int x) {
            this.val = x;
        }
    }

    public int minDepth(TreeNode root) {
        if (root == null) return 0;
        if (root.left == null && root.right == null) return 1;

        /*
         * 记住二叉树的深度是根节点到叶子节点的距离。重点，所以当left为null时，需要走右边去找。
         * 因为上面已经排除了root为叶子节点的可能（left=null && right=null就是叶子节点）
         */
        if (root.left == null) return minDepth(root.right) + 1;
        else if (root.right == null) return minDepth(root.left) + 1;
        else return 1 + Math.min(minDepth(root.left), minDepth(root.right));
    }
}
```