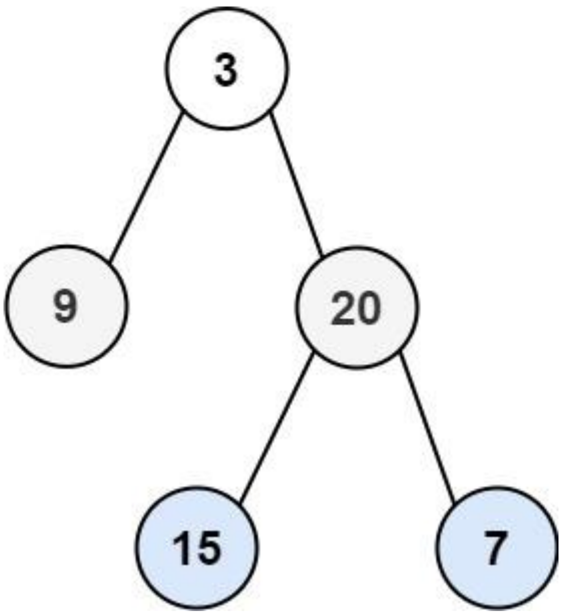
Binary Tree Level Order Traversal

Given the `root` of a binary tree, return *the level order traversal of its nodes' values*. (i.e., from left to right, level by level).

Example 1:



```
Input: root = [3,9,20,null,null,15,7]

Output: [[3],[9,20],[15,7]]
```

Example 2:

```
Input: root = [1]

Output: [[1]]
```

Example 3:

```
Input: root = []

Output: []
```

Constraints:

- The number of nodes in the tree is in the range `[0, 2000]`.
- `-1000 <= Node.val <= 1000`

```
/**
 * Definition for a binary tree node.
 * public class TreeNode {
 *     public int val;
 *     public TreeNode left;
 *     public TreeNode right;
 *     public TreeNode(int val=0, TreeNode left=null, TreeNode right=null) {
 *         this.val = val;
 *         this.left = left;
 *         this.right = right;
 *     }
 * }
 */

public class Solution {
    public IList<IList<int>> LevelOrder(TreeNode root)
    {
        IList<IList<int>> retVal = new List<IList<int>>();

        Traverse(root, retVal, 0);

        return retVal;
    }

    void Traverse(TreeNode root, IList<IList<int>> retVal, int depth)
    {
        if(root == null)
        {
            return;
        }

        if(retVal.Count == depth)
        {
            retVal.Add(new List<int>());
        }

        retVal[depth].Add(root.val);

        depth++;

        Traverse(root.left, retVal, depth);
        Traverse(root.right, retVal, depth);

    }
}
```