102. Binary Tree Level Order Traversal

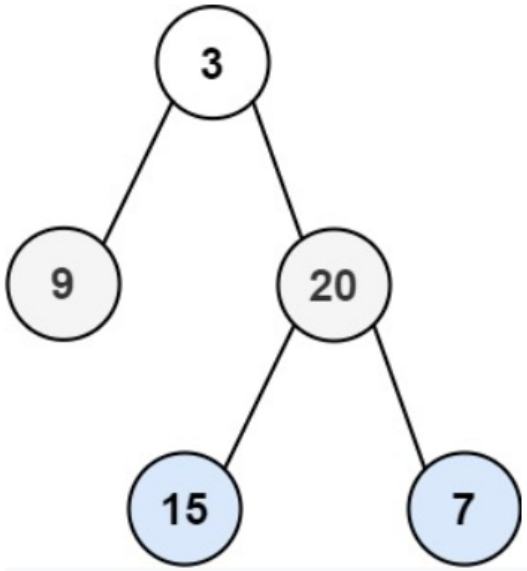
Medium 8497 166 Add to List Share

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).

Constraints:

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

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: []
```

We can also do with the help of queue.

That will also take same time & space complexity.

```
vector<vector<int>> result;

void buildLevel(TreeNode* root, int d) {
    if(root == NULL) return;

    if(result.size() == d) {
        result.push_back(vector<int>());
    }

    result[d].push_back(root->val);
    buildLevel(root->left, d+1);
    buildLevel(root->right, d+1);
}

vector<vector<int>> levelOrder(TreeNode* root) {
    buildLevel(root, 0);
    return result;
}
```

#100daysofDSA





/rvislive

Rakesh Vishwakarma