## 第48题——从上到下打印二叉树川

从上到下按层打印二叉树,同一层的节点按从左到右的顺序打印,每一层打印到一行。

例如: 给定二叉树: [3,9,20,null,null,15,7],

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

## 返回其层次遍历结果:

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

提示:

节点总数 <= 1000

## BFS遍历即可(1)

```
* Definition for a binary tree node.
 * struct TreeNode {
    int val;
     TreeNode *left;
     TreeNode *right;
      TreeNode(int x) : val(x), left(NULL), right(NULL) {}
 * };
*/
class Solution {
public:
   vector<vector<int>> levelOrder(TreeNode* root) {
       queue<TreeNode*> q;
       vector<vector<int>> res;
       if(root==NULL)
           return res;
       q.push(root);
       while(!q.empty())
```

```
vector<int> temp;
           for(int i=q.size();i>0;i--)
               TreeNode* node=q.front();
               q.pop();
               temp.push_back(node->val);
              if(node->left){
                  q.push(node->left);
              if(node->right){
                  q.push(node->right);
           }
           res.push_back(temp);
       return res;
   }
};
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链接: https://leetcode-cn.com/problems/cong-shang-dao-xia-da-yin-er-cha-shu-ii-lcof/solution/shi-
yong-dui-lie-lai-shi-xian-bfs-by-sak-y4b8/
来源:力扣(LeetCode)
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```