



链滴

[每日 LeetCode] 102. Binary Tree Level Order Traversal

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原文链接: <https://ld246.com/article/1559011227935>

来源网站: [链滴](#)

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Description:

Given a binary tree, return the `_level order _traversal` of its nodes' values. (ie, from left to right, evel by level).

For example:

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



return its level order traversal as:

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

思路：本题要求树的层序遍历，并返回二维数组。采用非递归写法，使用队列，每次对某结点进行访问并把其子结点入队，知道最后一个元素出队。

C++代码

```
/**
 * 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) {
        if (!root)
            return {};
        vector<vector<int>> res;
        queue<TreeNode*> q{{root}};
        while(!q.empty()){
            vector<int> oneLevel;
            for (int i=q.size(); i > 0; i--){
                TreeNode* t = q.front();
                q.pop();
            }
            res.push_back(oneLevel);
        }
    }
};
```

```
        oneLevel.push_back(t->val);
        if (t->left)
            q.push(t->left);
        if (t->right)
            q.push(t->right);
    }
    res.push_back(oneLevel);
}
return res;
}
};
```

运行时间: 8ms

运行内存: 13.9M