1. Binary Tree Level Order Traversal

Medium

Given a binary tree, return the *level order* traversal of its nodes’ values. (ie, from left to right, level by level).

For example: Given binary tree [3,9,20,null,null,15,7],

3  
 / \  
 9 20  
 / \  
 15 7

return its level order traversal as:

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

/\*\*  
 \* Definition for a binary tree node.  
 \* struct TreeNode {  
 \* int val;  
 \* TreeNode \*left;  
 \* TreeNode \*right;  
 \* TreeNode(int x) : val(x), left(NULL), right(NULL) {}  
 \* };  
 \*/  
typedef TreeNode\* pnode;  
class Solution {  
public:  
 vector<vector<int>> levelOrder(TreeNode\* root) {  
 vector<vector<int>>ans;  
 if(root == NULL)return ans;  
 vector<int>tmp;  
 queue<pnode>q;  
 q.push(root);  
 int cur = 1;  
 int next = 0;  
 while(!q.empty()){  
 pnode t = q.front();  
 q.pop();  
 cur--;  
 tmp.push\_back(t->val);  
 if(t->left != NULL){  
 q.push(t->left);  
 next++;  
 }  
 if(t->right != NULL){  
 q.push(t->right);  
 next++;  
 }  
 if(cur == 0){  
 cur = next;  
 next = 0;  
 ans.push\_back(tmp);  
 tmp.clear();  
 }  
 }  
 return ans;  
 }  
};