 Marwadi University	Marwadi University Faculty of Technology Department of Information and Communication Technology	
Sem : 4	Name : VEDANT BHARAD	
Day : 125	Date : 19/2/2023	Enrollment No: 92100133023


CP Club 365 Days Challenge

Programming language – C++

Problem Statement


<https://leetcode.com/problems/binary-tree-zigzag-level-order-traversal/>

Git :- https://github.com/Vedantbharad2603/CP_club_365_Days

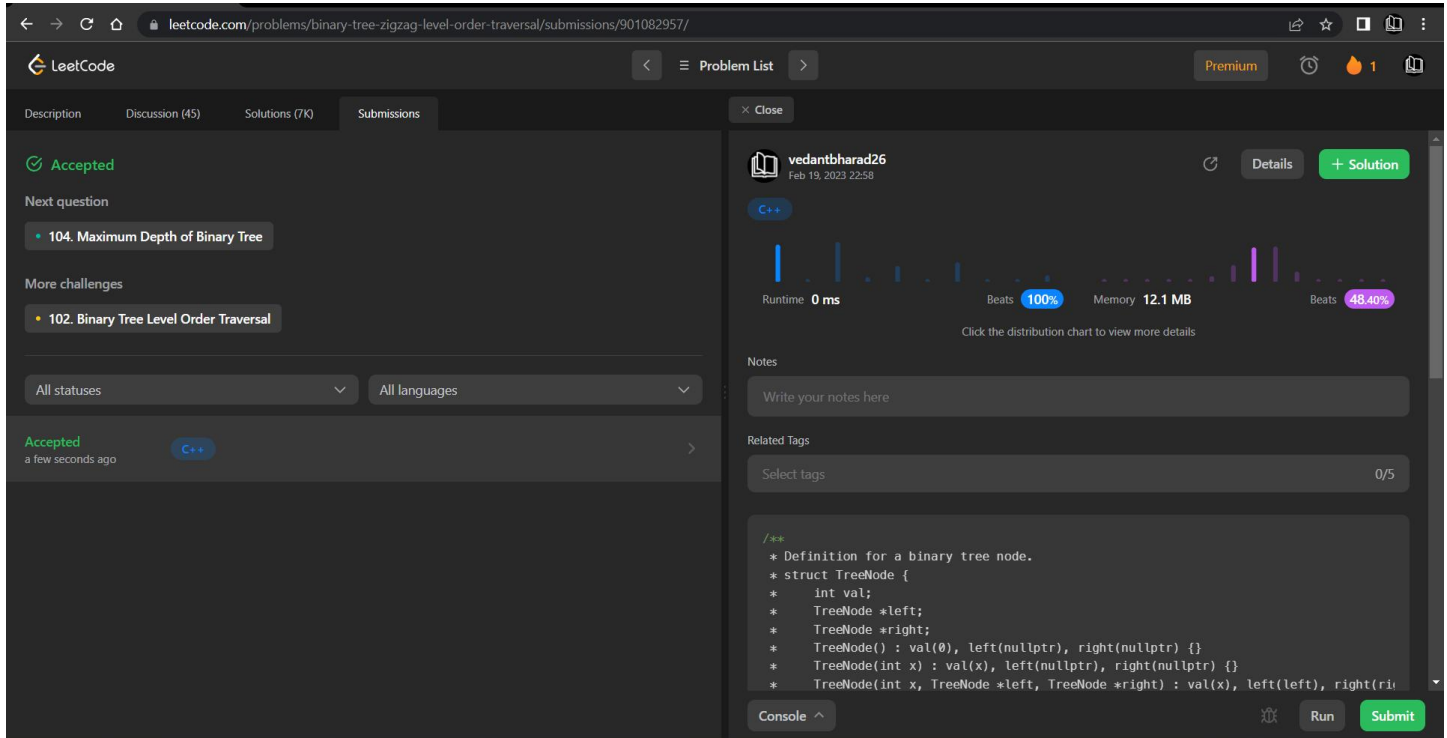
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Your Code:

```
// 0x125Day of 0x365Days challenge
// VEDANT BHARAD
// 17-2-2023
class Solution {
public:
    vector<vector<int>> zigzagLevelOrder(TreeNode* root) {
        if (root == NULL) {
            return vector<vector<int>> > ();
        }
        vector<vector<int>> toReturn;
        queue<TreeNode*> tempQueue;
        tempQueue.push(root);
        bool ltr = true;
        while ( !tempQueue.empty()) {
            int size = tempQueue.size();
            vector<int> row(size);
            for (int loop = 0; loop < size; loop++) {
                TreeNode* node = tempQueue.front();
                tempQueue.pop();
                int index = (ltr) ? loop : (size - 1 - loop);
                row[index] = node->val;
                if (node->left) {
                    tempQueue.push(node->left);
                }
                if (node->right) {
                    tempQueue.push(node->right);
                }
            }
            ltr = !ltr;
            toReturn.push_back(row);
        }
        return toReturn;
    }
};
```

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Output (Screen Shot):



The screenshot shows a LeetCode submission for the problem "Binary Tree Zigzag Level Order Traversal". The submission is accepted, with a runtime of 0 ms, 100% beats, and 12.1 MB memory. The code is in C++ and defines a binary tree node structure and a traversal function.

```

/**
 * Definition for a binary tree node.
 * struct TreeNode {
 *     int val;
 *     TreeNode *left;
 *     TreeNode *right;
 *     TreeNode() : val(0), left(nullptr), right(nullptr) {}
 *     TreeNode(int x) : val(x), left(nullptr), right(nullptr) {}
 *     TreeNode(int x, TreeNode *left, TreeNode *right) : val(x), left(left), right(right) {}
 * };
 */

```

Understanding about problem:

- In this task I need to return one vector in which there will be zigzag level order traversal of given binary tree.

Note: If you can't understand the problem, feel free to contact us and we'll help you. Please don't copy and paste from anywhere.

ALL THE BEST
Team CP Club