

Problem

Editorial

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10 15

Output: 0

Explanation:
Leaves 10, 15 and 30 are not at same level.

Your Task:
You dont need to read input or print anything. Complete the function **check()** which takes root node as input parameter and returns true/false depending on whether all the leaf nodes are at the same level or not.

Expected Time Complexity: O(N)
Expected Auxiliary Space: O(height of tree)

Constraints:
1 ≤ N ≤ 10^3

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Output Window

Problem Solved Successfully 108 2 days ago

You get marks only for the first correct submission if you solve the problem without viewing the full solution.

Can anyone explain what is the problem in this code
pass 8 conditions out of 1033 test cases:

Test Cases Passed: 1033 / 1033

Correct Submission Count: 2

Attempts No.: 4

0.26 / 1.56

```
bool check(Node *root)
{
    if(root==nullptr) return true;
    map<int,Node*> mp;
    queue<pair<Node*,int>> q;
    q.push({root,0});
    while(q.empty()==false)
    {
        auto u=q.front();
        q.pop();
        Node*curr=u.first;
        int hd=u.second;
        mp[hd]=curr;
        if(curr->left!=nullptr) q.push({curr->left,hd+1});
        if(curr->right!=nullptr) q.push({curr->right,hd+1});
    }
    int level=-1;
    for(auto u: mp)
    {
        if(u.second->left==nullptr && u.second->right==nullptr)
        {
            if(level== -1)
            {
                level=u.first;
            }
            if(u.first!=level) return false;
        }
    }
    return true;
}
```

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C++ (g++ 5.4) ▼

Test against custom input

```
95 Node* right;
96 };
97 */
98
99 class Solution{
100 public:
101     void solve(Node* root, int* level, int currentLevel, bool* ans){
102         if(root == NULL)
103             return;
104
105         if(root->left == NULL and root->right == NULL){
106             if(*level == -1)
107                 *level = currentLevel;
108             else if(*level != currentLevel)
109                 *ans = *ans and false;
110             else *ans = *ans and true;
111         }
112         solve(root->left, level, currentLevel + 1, ans);
113
114         solve(root->right, level, currentLevel + 1, ans);
115     }
116 }
117 /*You are required to complete this method*/
118
```

Compile & Run

Submit