

#### **Problem 4: (10 point) - Tree**

Given the following code

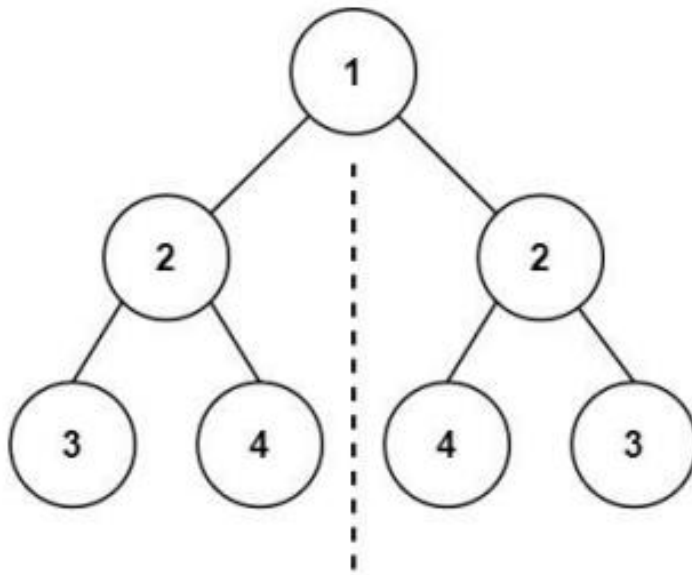
```
struct TreeNode {
    int val;
    TreeNode *left;
    TreeNode *right;
    TreeNode() : val(0), left(nullptr), right(nullptr) {}
    TreeNode(int x) : val(x), left(nullptr), right(nullptr) {}
    TreeNode(int x, TreeNode *left, TreeNode *right) : val(x), left(left),
right(right) {}
};

class Solution {
public:
    bool isSymmetric(TreeNode* root) {
        // write you code here
    }
};

// add main method and test cases to test your code
```

Given the root of a binary tree, check whether it is a mirror of itself (i.e., symmetric around its center).

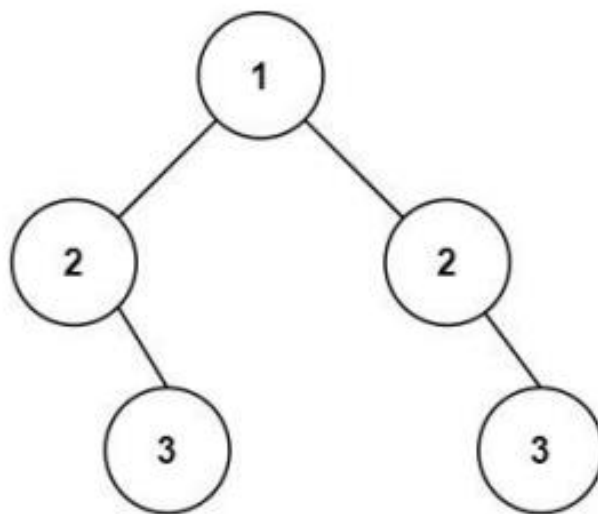
Example 1:



Input: root = [1,2,2,3,4,4,3]

Output: true

Example 2:



Input: root = [1,2,2,null,3,null,3]

Output: false