



# DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

## Experiment 5

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**Subject Name: AP LAB 2**

**Subject Code:22CSP-351**

### 1. Aim: Trees

- a. Maximum Depth of Binary Tree
- b. Symmetric Tree

### 2. Code:

```
a. class Solution {
    public int maxDepth(TreeNode root) {
        if(root == null)
            return 0;
        int left = maxDepth(root.left);
        int right = maxDepth(root.right);
        return Math.max(left,right)+1;
    }
}

b. class Solution {
    public boolean isSymmetric(TreeNode root) {
        if (root == null) {
            return true;
        }
        return isMirror(root.left, root.right);
    }
    private boolean isMirror(TreeNode node1, TreeNode node2) {
        if (node1 == null && node2 == null) {
            return true;
        }
        if (node1 == null || node2 == null) {
            return false;
        }
    }
}
```



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```
return node1.val == node2.val && isMirror(node1.left, node2.right) && isMirror(node1.right,  
node2.left);  
}  
}
```

### 3. Output:

a.

Testcase	Test Result
Accepted	Runtime: 0 ms
• Case 1	• Case 2
Input	Input
root = [3,9,20,null,null,15,7]	root = [1,null,2]
Output	Output
3	2
Expected	Expected
3	2

b.

Testcase	Test Result
Accepted	Runtime: 0 ms
• Case 1	• Case 2
Input	Input
root = [1,2,2,3,4,4,3]	root = [1,2,2,null,3,null,3]
Output	Output
true	false
Expected	Expected
true	false