Experiment 5

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Semester:6TH **Date of Performance:17/02/25**

Subject Name: AP LAB 2 **Subject Code:22CSP-351**

1. **Aim: Trees**
   a. Maximum Depth of Binary Tree
   b. Symmetric Tree

2. **Code:**

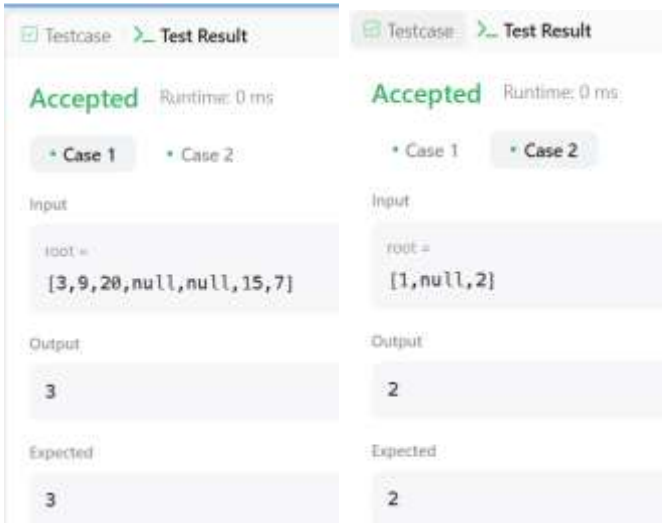
a.
```
class Solution {
public int maxDepth(TreeNode root) {
    if(root == null)
      return 0;
    int left = maxDepth(root.left);
    int right = maxDepth(root.right);
    return Math.max(left,right)+1;
}
}
```

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;
    }
```

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

3. **Output:**

a.



b.