

<https://course.acciojob.com/idle?question=dba1e72d-2519-4374-a990-90e182f7c344>

● EASY

● Max Score: 30 Points

Check if two Binary Trees are Mirror

Given two Binary Trees `root1` and `root2`, write a function that returns true if two trees are mirror of each other, else false.

Note: You just need to implement the `areMirror()` function and return true if two trees are mirror of each other, else false.

Input Format

First line contains a string representing the tree with `root1`. Second line contains a string representing the tree with `root2`.

The values in the string are in the order of level order traversal of the tree where, numbers denote node values, and a character "N" denotes NULL child.

Output Format

Print true if two trees are mirror of each other, else false.

Example 1

Input

```
9 8 N 6 1 N N N N
9 N 8 1 6 N N N N
```

Output

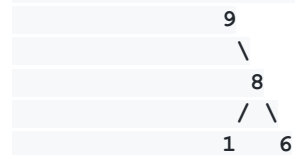
```
true
```

Explanation

The first tree can be represented as:-



The second tree can be represented as:-



The first tree is a mirror image of second tree and vice-versa.

Example 2

Input

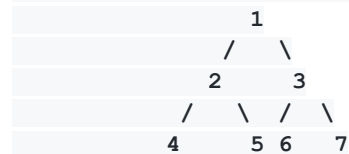
```
1 2 3 4 5 6 7 N N N N N N N N
3 6 7 N N N N
```

Output

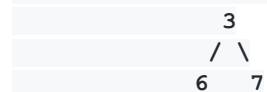
false

Explanation

The first tree can be represented as:-



The second tree can be represented as:-



The first tree is not a mirror image of second tree and vice-versa.

Constraints

The number of nodes in the both the trees are in the range [1, 500]

`-500 <= Node.data <= 500`

Topic Tags

- Recursion
- Trees

My code

```
// n java
```

```
import java.util.LinkedList;
import java.util.Queue;
import java.io.*;
import java.util.*;
```

```
class Node{
    int data;
    Node left;
    Node right;
    Node(int data){
        this.data = data;
        left=null;
        right=null;
    }
}
```

```

class Main {
    static Node buildTree(String str){
        // System.out.print(str);
        if(str.length()==0 || str.charAt(0)=='N'){
            return null;
        }
        String ip[] = str.split(" ");
        Node root = new Node(Integer.parseInt(ip[0]));
        Queue<Node> queue = new LinkedList<>();
        queue.add(root);
        int i = 1;
        while(queue.size()>0 && i < ip.length) {
            Node currNode = queue.peek();
            queue.remove();
            String currVal = ip[i];
            if(!currVal.equals("N")) {
                currNode.left = new Node(Integer.parseInt(currVal));
                queue.add(currNode.left);
            }
            i++;
            if(i >= ip.length)
                break;
            currVal = ip[i];
            if(!currVal.equals("N")) {
                currNode.right = new Node(Integer.parseInt(currVal));
                queue.add(currNode.right);
            }
            i++;
        }
    }
}

```

```

        return root;
    }
    void inOrder(Node node) {
        if (node == null) {
            return;
        }
        inOrder(node.left);
        System.out.print(node.data + " ");
        inOrder(node.right);
    }

    public static void main (String[] args) throws IOException{
        //BufferedReader br = new BufferedReader(new
        InputStreamReader(System.in));
        Scanner sc = new Scanner(System.in);

        String s = sc.nextLine();
        String s1 = sc.nextLine();

        Node root1 = buildTree(s);
        Node root2 = buildTree(s1);
        Solution tree = new Solution();
        boolean ans = tree.areMirror(root1,root2);
        System.out.println(ans);
    }
}

```

```
class Solution{

    public static boolean areMirror(Node root1, Node root2) {
        // Write your code here
        if(root1==null && root2==null)
            return true;
        if(root1.data !=root2.data)
            return false;
        if(root1!=null && root2==null)
            return false;
        if(root1==null && root2!=null)
            return false;
        return
areMirror(root1.left,root2.right)&&areMirror(root1.right,root2.left);
    }

}
```