

Check Identical Trees

```
#include <stdio.h>
#include <stdlib.h>

struct node
{
    int data;
    struct node *left;
    struct node *right;
};

struct node *newNode(int data)
{
    struct node *temp = (struct node *)malloc(sizeof(struct node));
    temp->data = data;
    temp->left = temp->right = NULL;
    return temp;
}

int checkIdenticalTrees(struct node *root1, struct node *root2)
{
    if(!root1 && !root2)
        return 1;
    if(root1 && root2)
    {
        return (root1->data == root2->data)&&
            checkIdenticalTrees(root1->left, root2->left)&&
            checkIdenticalTrees(root1->right, root2->right);
    }
    return 0;
}

int main()
{
    struct node *root1, *root2;
    root1 = newNode(10);
    root1->left = newNode(20);
    root1->right = newNode(30);
    root1->left->left = newNode(40);
    root1->right->left = newNode(50);
    root2 = newNode(10);
    root2->left = newNode(20);
    root2->right = newNode(30);
    root2->left->left = newNode(40);
    root2->right->left = newNode(50);
    checkIdenticalTrees(root1, root2)?printf("Both are identical"): printf("Both are not identical\n");
    return 0;
}

Time complexity: O(n)
Space Complexity: O(n)
```