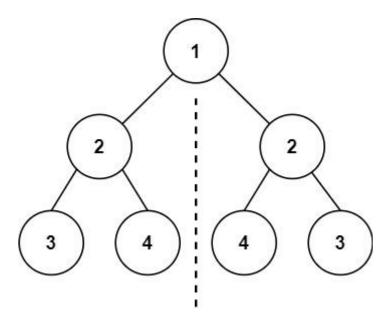
## **Symmetric Tree**

Question: https://leetcode.com/problems/symmetric-tree/

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

## My approach:

It is clearly visible that we are performing a **BFS** operation and comparing left with right. Specifically **left.left** with **right.right**.

So I created a manipulated BFS solution to solve the problem.

BFS Explanation: <a href="https://www.geeksforgeeks.org/level-order-tree-traversal/">https://www.geeksforgeeks.org/level-order-tree-traversal/</a>

My Code: <a href="https://gist.github.com/vermaayush680/12dad7ad55dffec753d724575f167479">https://gist.github.com/vermaayush680/12dad7ad55dffec753d724575f167479</a>

if not root:

return True

```
queue=[root.left,root.right]
while(len(queue)>0):
    left=queue.pop(0)
    right=queue.pop(0)

if not left and not right:
        continue
    elif left and right and left.val==right.val:
        pass
    else:
        return False

    queue.append(left.left)
    queue.append(right.right)
    queue.append(left.right)
    queue.append(right.left)
return True
```

Another approach I could think of was to traverse any 1 side, either left or right and save its mirror image(left->right and right->left)

Then check if this mirror image is equivalent to the other side or not.

Will try this approach later.