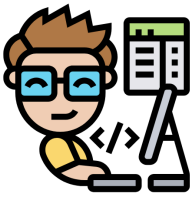

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Check if a Binary Tree is Symmetric

You are given the root of a binary tree. Your task is to determine whether the tree is symmetric. A binary tree is symmetric if the left and right subtrees are mirror images of each other.

Input:

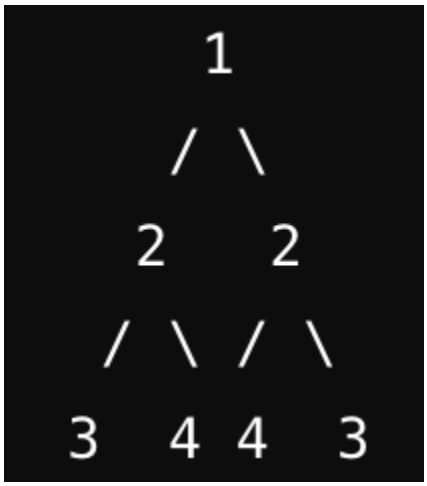
- The root of the binary tree.

Output:

- Return true if the binary tree is symmetric, otherwise return false.

Examples:

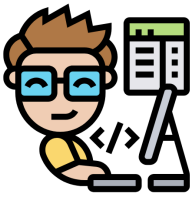
- Example 1
  Input: [1, 2, 2, 3, 4, 4, 3]
  Output: true
  Explanation:



  This binary tree is symmetric as the left and right subtrees are mirror images of each other.

Constraints:

- The number of nodes in the tree is between 1 and 10^4
- The value of each node is between −100 and 100.



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Test Cases:

1. Input: [1, 2, 2, 3, 4, 4, 3]
   Output: true
2. Input: [1, 2, 2, null, 3, null, 3]
   Output: false
3. Input: [1]
   Output: true
4. Input: []
   Output: true
5. Input: [1, 2, 2, 3, null, null, 3]
   Output: false

Edge Cases:

1. An empty tree is symmetric by definition. Return true.
2. A single-node tree is symmetric since there are no children to compare. Return true.
3. If there is one child but not the other, the tree is not symmetric. Return false.