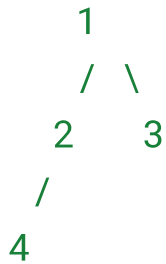


## 1. Find Height of a Binary Tree

Find the maximum depth (height) of a tree using recursion.

### Example:

Input:



Output: 3

## 2. Count Leaf and Non-Leaf Nodes

Count how many nodes are **leaves** (no children) and how many are **non-leaves**.

## 4. Level Order Traversal

Traverse the tree level by level using a queue.

**Example:**

Input:

```
  1
 / \
2   3
```

Output: 1 2 3

## 5. Diameter of a Binary Tree (Leetcode #543)

Find the **longest path** between any two nodes in a tree.

## 6. Check if a Binary Tree is a BST

Verify if all nodes satisfy BST properties.

## 7. Find Path from Root to a Given Node

Given a node value, print the path from root to that node.

## 8. Sum of All Left Leaves

Find the sum of all **left leaf nodes** in a binary tree.

## 9. Print Ancestors of a Given Node

Given a node **x**, print all its **ancestors** from root to parent.

**Example:**

Input:



Ancestors of 5: 2, 1

## 10. Find Kth Smallest Element in a BST

Return the **Kth smallest** element using inorder traversal.

**Example:**

Input: [3, 1, 4, null, 2], k = 1

Output: 1