Binary Tree Data Structure - GeeksforGeeks

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Courses Tutorials Practice Jobs DSA Tutorial Interview Questions Quizzes Must Do Advanced DSA System Design Aptitude Puzzles Interview Corner DSA Python Technical Scripter 2026 Explore DSA Fundamentals Logic Building Problems Analysis of Algorithms Data Structures Array Data Structure String in Data Structure Hashing in Data Structure Linked List Data Structure Stack Data Structure Queue Data Structure Tree Data Structure Graph Data Structure Trie Data Structure Algorithms Searching Algorithms Sorting Algorithms Introduction to Recursion Greedy Algorithms Tutorial Graph Algorithms Dynamic Programming or DP Bitwise Algorithms Advanced Segment Tree Binary Indexed Tree or Fenwick Tree Square Root (Sqrt) Decomposition Algorithm Binary Lifting Geometry Interview Preparation Interview Corner GfG160 Practice Problem GeeksforGeeks Practice - Leading Online Coding Platform Problem of The Day - Develop the Habit of Coding DSA Course 90% Refund Binary Tree Data Structure Last Updated : 15 Dec, 2025 A Binary Tree Data Structure is a hierarchical data structure in which each node has at most two children, referred to as the left child and the right child. Introduction Introduction Properties Types Applications & Limitations Enumeration Basic Operations Inorder , Preorder &, Postorder Traversals Level Order Tree Traversal Max Depth or Height Insertion & Deletion Easy Problems Size of a tree Max in Tree Sum Tree Identical Trees Mirror Tree Cousins in Tree Perfect Binary Tree Foldable Binary Trees Symmetric Tree (Mirror Image of itself) Subtree with Given Sum Succinct Encoding of Binary Tree Get Level of a Node Check for Complete Binary Tree Depth of a full Binary Tree from Preorder More Traversals BFS vs DFS for Binary Tree Iterative Inorder Iterative Preorder Iterative Postorder Traversal Using Two Stacks Morris Traversal Morris traversal for Preorder Morris Traversal for Postorder Medium Problems Diameter of a Binary Tree Duplicate Subtrees Removing an edge divides in two halves ? Level order traversal in spiral form Reverse Level Order Traversal Tree from Inorder and Level order Clone a Binary Tree with Random Pointers All possible binary trees with given Inorder Populate Inorder Successors Complete Binary Tree from Linked List Min swaps to convert to BST Binary Tree to Doubly Linked List Convert a tree to forest of even nodes Flip Binary Tree Root to leaf paths without using recursion Check if Preorder, Inorder and Postorder are of same tree Check for Subtree Maximum subtree sum Maximum sum with no two adjacent Lowest Common Ancestor Height of a generic tree from parent array Distance between two given keys Diagonal Traversal of Binary Tree Boundary Traversal of binary tree Hard Problems Min Time to Burn from Leaf Modify a binary tree to get Preorder traversal using right pointers Full Binary Tree using its Preorder and Mirror's Preorder A special tree from given preorder Tree from ancestor matrix Full k-ary tree from its preorder Binary Tree from String with bracket representation Binary Tree into Doubly Linked List in spiral fashion Binary Tree to a Circular Doubly Link List Ternary Expression to a Binary Tree Check if there is a root to leaf path with given sequence Remove all nodes which don’t lie in any path with sum>= k Maximum spiral sum in Binary Tree Sum of nodes at k-th level in a tree represented as string Sum of all the numbers that are formed from root to leaf paths Merge Two Binary Trees by doing Node Sum (Recursive and Iterative) Root of the tree from children ID sums Quick Links : 'Practice Problems' on Trees 'Quizzes' on Binary Trees Learn Data Structure and Algorithms | DSA Tutorial Top Interview Questions on Tree Comment Article Tags: Article Tags: Tree DSA