Getting started

1. Inorder - https://leetcode.com/problems/binary-tree-inorder-traversal/
2. Preorder - https://leetcode.com/problems/binary-tree-preorder-traversal/
3. Postorder - https://leetcode.com/problems/binary-tree-postorder-traversal/
4. Diameter - https://leetcode.com/problems/diameter-of-binary-tree/
5. Same Tree - https://leetcode.com/problems/same-tree/
6. Symmetric Tree - https://leetcode.com/problems/symmetric-tree/
7. Level order - https://leetcode.com/problems/binary-tree-level-order-traversal/
8. Min Depth - https://leetcode.com/problems/minimum-depth-of-binary-tree/
9. Max Depth - https://leetcode.com/problems/maximum-depth-of-binary-tree/
10. Invert a Binary Tree - https://leetcode.com/problems/invert-binary-tree/
11. Is Balanced - https://leetcode.com/problems/balanced-binary-tree/
12. Max and Min in a BT - (try to do it in a single function i.e; find max and min at same time) https://practice.geeksforgeeks.org/problems/max-and-min-element-in-binary-tree/1/
13. Subtree of another - https://leetcode.com/problems/subtree-of-another-tree/
14. Merge two BT - https://leetcode.com/problems/merge-two-binary-trees/
15. Cousins in a BT - https://leetcode.com/problems/cousins-in-binary-tree/

Tricky Traversals

16. Zig Zag - https://leetcode.com/problems/binary-tree-zigzag-level-order-traversal/
17. Level order II - https://leetcode.com/problems/binary-tree-level-order-traversal-ii/
18. Vertical order traversal - https://www.interviewbit.com/problems/vertical-order-traversal-of-binary-tree/
19. Vertical sorted - https://leetcode.com/problems/vertical-order-traversal-of-a-binary-tree/
20. Diagonal traversal - https://practice.geeksforgeeks.org/problems/diagonal-traversal-of-binary-tree/1/
21. Anti-clockwise traversal - https://www.geeksforgeeks.org/anti-clockwise-spiral-traversal-of-a-binary-tree/
22. Longest zig zag - https://leetcode.com/problems/longest-zigzag-path-in-a-binary-tree/

Views

23. Left view - https://practice.geeksforgeeks.org/problems/left-view-of-binary-tree/1/
24. Right view - https://leetcode.com/problems/binary-tree-right-side-view/
25. Top view - https://practice.geeksforgeeks.org/problems/top-view-of-binary-tree/1/
26. Bottom view - https://practice.geeksforgeeks.org/problems/bottom-view-of-binary-tree/1/
27. Boundary traversal - https://practice.geeksforgeeks.org/problems/boundary-traversal-of-binary-tree/1/

Path-Based (ALL ARE IMP)

28. Root to Leaf paths - https://leetcode.com/problems/binary-tree-paths/
29. Path sum - https://leetcode.com/problems/path-sum/
30. Path sum II - https://leetcode.com/problems/path-sum-ii/
31. Lowest common Ancestor - https://leetcode.com/problems/lowest-common-ancestor-of-a-binary-tree/
32. Min distance between two nodes - https://practice.geeksforgeeks.org/problems/min-distance-between-two-given-nodes-of-a-binary-tree/1/
33. Max path sum (leaf to leaf) - https://practice.geeksforgeeks.org/problems/maximum-path-sum/1/
34. Maximum path sum - https://leetcode.com/problems/binary-tree-maximum-path-sum/
35. Path sum III - https://leetcode.com/problems/path-sum-iii/
36. Nodes at distance K - https://leetcode.com/problems/all-nodes-distance-k-in-binary-tree/
37. Burning tree - https://practice.geeksforgeeks.org/problems/burning-tree/1/
38. Sum Root to leaf numbers - https://leetcode.com/problems/sum-root-to-leaf-numbers/
39. Max diff b/w node and ancestor - https://practice.geeksforgeeks.org/problems/maximum-difference-between-node-and-its-ancestor/1

Tree Construction

40. BT from Inorder and post - https://leetcode.com/problems/construct-binary-tree-from-inorder-and-postorder-traversal/
41. BT from Inorder and pre - https://leetcode.com/problems/construct-binary-tree-from-preorder-and-inorder-traversal/
42. BT from post and pre - https://leetcode.com/problems/construct-binary-tree-from-preorder-and-postorder-traversal/
43. BT from level and In - https://practice.geeksforgeeks.org/problems/construct-tree-from-inorder-and-levelorder/1

Tree and Linked List

44. Binary tree to LL - https://leetcode.com/problems/flatten-binary-tree-to-linked-list/
45. Binary tree to DLL - https://practice.geeksforgeeks.org/problems/binary-tree-to-dll/1
46. Sorted LL to BST - https://leetcode.com/problems/convert-sorted-list-to-binary-search-tree/
47. Sorted DLL to BST - https://www.geeksforgeeks.org/in-place-conversion-of-sorted-dll-to-balanced-bst/

Mixed

48. Populate next right - https://leetcode.com/problems/populating-next-right-pointers-in-each-node/
49. Sum replacement - https://practice.geeksforgeeks.org/problems/transform-to-sum-tree/1/
50. Max product split - https://leetcode.com/problems/maximum-product-of-splitted-binary-tree/
51. Image multiplication - https://practice.geeksforgeeks.org/problems/image-multiplication0627/1
52. Tree Camera - https://leetcode.com/problems/binary-tree-cameras/
53. Distribute coins - https://leetcode.com/problems/distribute-coins-in-binary-tree/
54. Min Cost Tree - https://leetcode.com/problems/minimum-cost-tree-from-leaf-values/
55. Delete nodes and return forest - https://leetcode.com/problems/delete-nodes-and-return-forest/
56. House robber III - https://leetcode.com/problems/house-robber-iii/
57. Inform employees - https://leetcode.com/problems/time-needed-to-inform-all-employees/
58. Count complete tree nodes - https://leetcode.com/problems/count-complete-tree-nodes/
59. Serialize and deserialize a BT - https://leetcode.com/problems/serialize-and-deserialize-binary-tree/
60. Duplicate subtrees - https://leetcode.com/problems/find-duplicate-subtrees/
61. Prune a BT - https://leetcode.com/problems/binary-tree-pruning/
62. Diameter of Generic Tree - https://leetcode.com/problems/diameter-of-n-ary-tree/
63. Morris Traversal - https://www.geeksforgeeks.org/inorder-tree-traversal-without-recursion-and-without-stack/
64. Coloring game - https://leetcode.com/problems/binary-tree-coloring-game/

Binary Search Tree

65. Search - https://leetcode.com/problems/search-in-a-binary-search-tree/
66. Insert - https://leetcode.com/problems/insert-into-a-binary-search-tree/
67. Delete - https://leetcode.com/problems/delete-node-in-a-bst/
68. Sorted array to BST - https://leetcode.com/problems/convert-sorted-array-to-binary-search-tree/
69. Trim BST - https://leetcode.com/problems/trim-a-binary-search-tree/
70. LCA - https://leetcode.com/problems/lowest-common-ancestor-of-a-binary-search-tree/
71. Validate BST - https://leetcode.com/problems/validate-binary-search-tree/
72. Two sum - https://leetcode.com/problems/two-sum-iv-input-is-a-bst/
73. Recover BST - https://leetcode.com/problems/recover-binary-search-tree/
74. BST iterator - https://leetcode.com/problems/binary-search-tree-iterator/
75. Balance a BST - https://leetcode.com/problems/balance-a-binary-search-tree/
76. BST from Preorder - https://leetcode.com/problems/construct-binary-search-tree-from-preorder-traversal/

77. Check Preorder is of a BST - https://practice.geeksforgeeks.org/problems/preorder-traversal-and-bst4006/1/
78. Kth smallest - https://leetcode.com/problems/kth-smallest-element-in-a-bst/
79. Num BST - https://leetcode.com/problems/unique-binary-search-trees/
80. Largest BST in a BT - https://practice.geeksforgeeks.org/problems/largest-bst/1
81. Max Sum BST - https://leetcode.com/problems/maximum-sum-bst-in-binary-tree/
82. BST from Postorder - https://practice.geeksforgeeks.org/problems/construct-bst-from-post-order/1/
83. BST from Levelorder - https://practice.geeksforgeeks.org/problems/convert-level-order-traversal-to-bst/1

DP on Trees (Binary Lifting, Re-Rooting)

84. Sum of distances - https://leetcode.com/problems/sum-of-distances-in-tree/
85. Distinct colors - https://cses.fi/problemset/task/1139
86. Kth Ancestor - https://leetcode.com/problems/kth-ancestor-of-a-tree-node/
87. Tree with Max cost - https://codeforces.com/contest/1092/problem/F
88. Tree Painting - https://codeforces.com/problemset/problem/1187/E
89. Apple man and Tree - https://codeforces.com/problemset/problem/461/B

AVL TREE

90. Insert - https://practice.geeksforgeeks.org/problems/avl-tree-insertion/1/
91. Delete - https://practice.geeksforgeeks.org/problems/avl-tree-deletion/1/

Theory

92. MCQ's - https://www.sanfoundry.com/data-structure-questions-answers-binary-tree-properties/ https://www.careerride.com/view/mcqs-on-tree-with-answers-19636.aspx
93. Time, space - https://www.geeksforgeeks.org/complexity-different-operations-binary-tree-binary-search-tree-avl-tree/
94. Applications - https://www.scaler.com/topics/data-structures/tree-data-structure/

***Indicates => asked in various interviews**
Learn both recursive and iterative approaches for in, pre, post order in a BT

Questions are given in an order such that later ones depend on concepts used in previous problems, so every problem is a must do. Can skip Q: 87 - 91

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