### Tree

## 1. A program to check if a binary tree is BST or not

<http://www.geeksforgeeks.org/a-program-to-check-if-a-binary-tree-is-bst-or-not/>

2. Level order traversal in spiral form

<http://www.geeksforgeeks.org/level-order-traversal-in-spiral-form/>

3. Convert an arbitrary Binary Tree to a tree that holds Children Sum Property

<http://www.geeksforgeeks.org/convert-an-arbitrary-binary-tree-to-a-tree-that-holds-children-sum-property/>

4. Diameter of a Binary Tree

<http://www.geeksforgeeks.org/diameter-of-a-binary-tree/>

5. How to determine if a binary tree is height-balanced?

<http://www.geeksforgeeks.org/how-to-determine-if-a-binary-tree-is-balanced/>

6. Inorder Tree Traversal without Recursion

<http://www.geeksforgeeks.org/inorder-tree-traversal-without-recursion/>

7. Inorder Tree Traversal without recursion and without stack!

<http://www.geeksforgeeks.org/inorder-tree-traversal-without-recursion-and-without-stack/>

8. Construct Tree from given Inorder and Preorder traversals

<http://www.geeksforgeeks.org/construct-tree-from-given-inorder-and-preorder-traversal/>

9 Double Tree

<http://www.geeksforgeeks.org/double-tree/>

10. Maximum width of a binary tree

<http://www.geeksforgeeks.org/maximum-width-of-a-binary-tree/>

11. Total number of possible Binary Search Trees with n keys

Total number of possible Binary Search Trees with n different keys = [Catalan number Cn](http://en.wikipedia.org/wiki/Catalan_number)= (2n)!/(n+1)!\*n!

12. Foldable Binary Trees

<http://www.geeksforgeeks.org/foldable-binary-trees/>

13. Inorder Successor

<http://www.geeksforgeeks.org/inorder-successor-in-binary-search-tree/>

14. Find k-th smallest element in BST (Order Statistics in BST) – using Segment Tree

<http://www.geeksforgeeks.org/find-k-th-smallest-element-in-bst-order-statistics-in-bst/>

15. Tournament Tree (Winner Tree) and Binary Heap

<http://www.geeksforgeeks.org/tournament-tree-and-binary-heap/>

16. Decision Trees – Fake (Counterfeit) Coin Puzzle (12 Coin Puzzle)

<http://www.geeksforgeeks.org/decision-trees-fake-coin-puzzle/>

17,. Check if a binary tree is subtree of another binary tree

<http://www.geeksforgeeks.org/check-if-a-binary-tree-is-subtree-of-another-binary-tree/>

18. Connect nodes at same level

<http://www.geeksforgeeks.org/connect-nodes-at-same-level/>

19. Connect nodes at same level using constant extra space

<http://www.geeksforgeeks.org/connect-nodes-at-same-level-with-o1-extra-space/>

20.