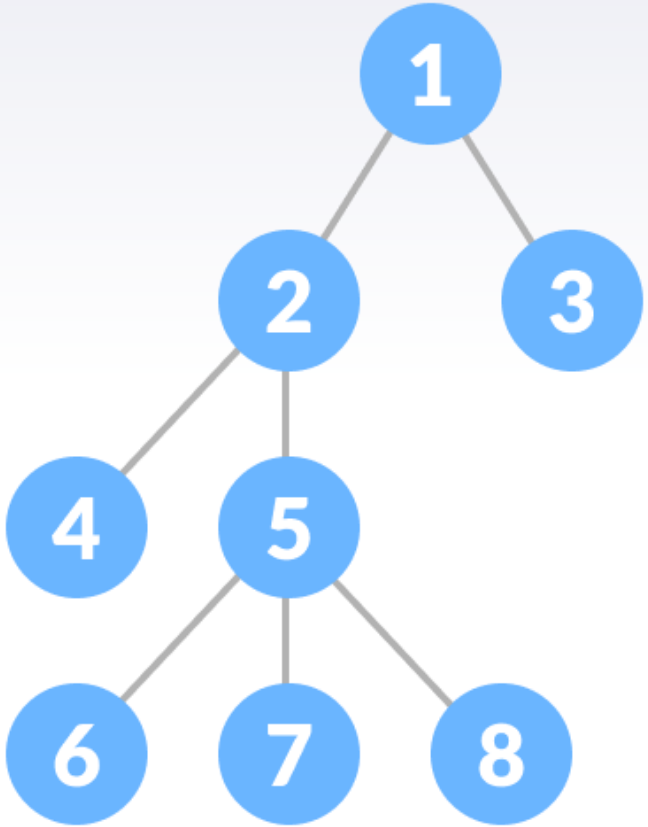
CODESHOWS MODULE -7

TOPIC :- TREES



Binary Tree

1

1. Binary Tree Introduction and Implementation
2. Properties of Binary Tree
3. Types of Binary Tree
4. Tree Traversals
5. BFS vs DFS for Binary Tree
6. Lowest Common Ancestor

Binary Search Tree(BST)

2

1. BST
2. BST(Search and Insertion)
3. BST(Delete)
4. Self-balancing BST
5. AVL Tree
6. AVL Tree (Video)

HEAP

3

1. Heap Data Structure
2. Heap, Heap sort, Heapify, Priority Queues (Video)
3. Playlist on Heap Data Structure

Trie

(Generally not asked in interviews)

4

1. Trie | (Insert and Search) - GeeksforGeeks
2. Trie Delete
3. Playlist on Trie
4. Word Boggle
5. Count of distinct substrings
6. Shortest Unique Prefix
7. Hotel Reviews
8. Word Break Problem (Trie solution)

TIME FOR BRAIN STORMING

5

1. Find the Closest Element in BST
2. Left view of Binary Tree
3. Top view of Binary Tree
4. Right view of Binary Tree
5. Bottom view of Binary Tree
6. Symmetric Binary Tree
7. Add all greater values to every node in a BST

6

8. Construct Binary Tree from Preorder & Inorder Traversal
9. Construct Binary Tree from Inorder & Postorder Traversal
10. Children Sum Parent
11. Check for Balanced Tree
12. Validate Binary Search Tree
13. K distance from root
14. Find median in a stream
15. K largest elements
16. Kth Largest Element in an Array

7

17. Merge k sorted arrays(Same Sized Arrays)
18. Merge k sorted arrays(Different Sized Arrays)
19. Nearly Sorted Algorithm
20. Same Tree
21. Binary tree maximum path sum
22. Binary Tree Level Order Traversal
23. Binary Tree Zig-Zag Level Order Traversal
24. Binary Tree Vertical Order Traversal
25. Height of a Binary Tree
26. Diameter of Binary Tree
27. Maximum Sum BST in Binary Tree
28. Check if a Binary Tree is height balanced

29. Lowest Common Ancestor of a Binary Tree
30. Flatten Binary Tree to Linked List
31. Range Sum of BST
32. Convert a given Binary Tree to Doubly Linked List
33. Merge Two Binary Trees
34. Convert Sorted Array to Binary Search Tree
35. Merge Two Balanced Binary Search Trees
36. Binary Tree to BST
37. Delete Node in a BST
38. Recover Binary Search Tree
39. Path Sum III
40. Problem - 1466D - Codeforces

KEEP
CALM
AND
KEEP
CODING

Note : Mostly questions are asked from binary trees or binary search trees only, but very rarely questions from generic trees can also be asked. So do practice some questions of generic trees.