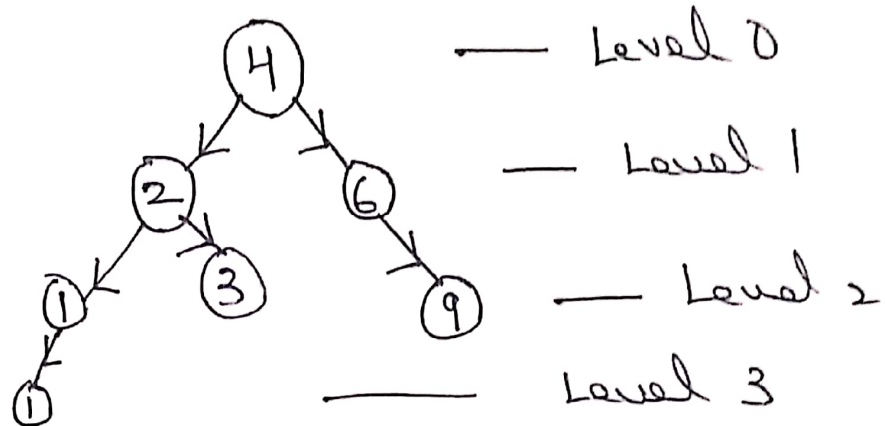


Binary Search Tree

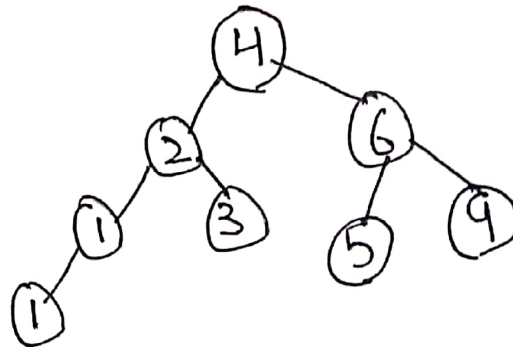
BST

Original Array = 4, 2, 1, 3, 1, 6, 9

A#1 → Insertion



⇒ Insert → 5



A#4 → Level-Order Traversal → BFS

4, 2, 6, 1, 3, 5, 9, 1

A#5 → Depth-First Search

① Pre-order \rightarrow DLR

4, 2, 1, 1, 3, 6, 5, 9

② In-order \rightarrow LDR

1, 1, 2, 3, 4, 5, 6, 9

③ Post-order \rightarrow LRD

1, 1, 3, 2, 5, 9, 6, 4

A#6 \rightarrow Min & Max

Min = 1
Max = 9

A#7 \rightarrow Height

$\text{Max}(H_L, H_R) + 1$

$\rightarrow \text{Max}(2, 1) + 1$
 $= 2 + 1 = 3$