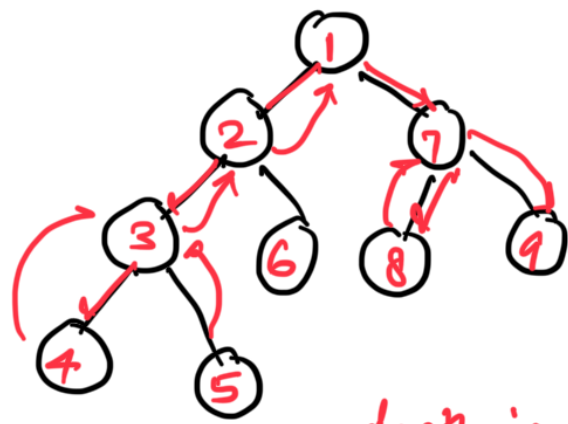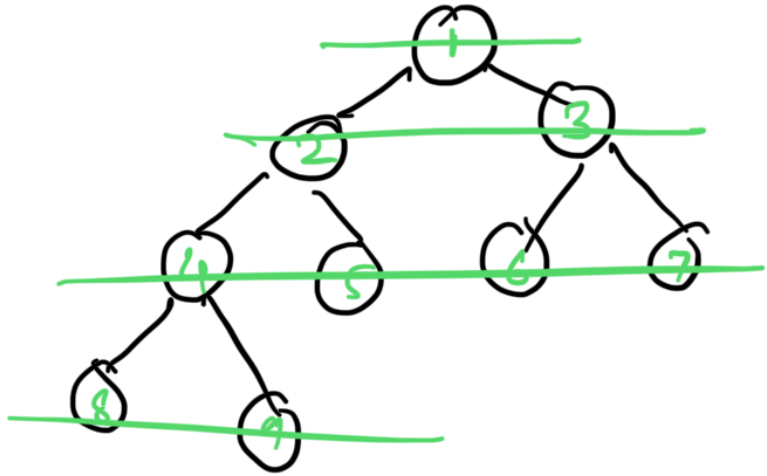Tree Traversals-

① DFS → depth
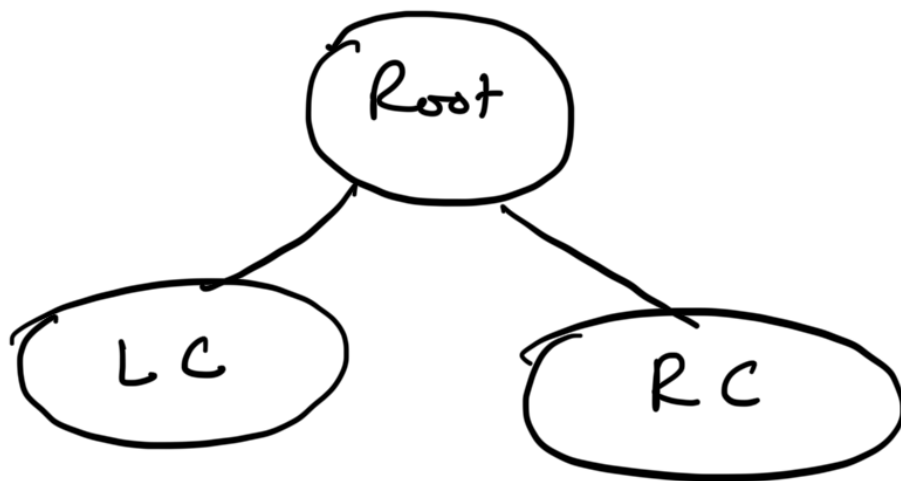

depth is consider for DFS

② BFS — Breadth/levels

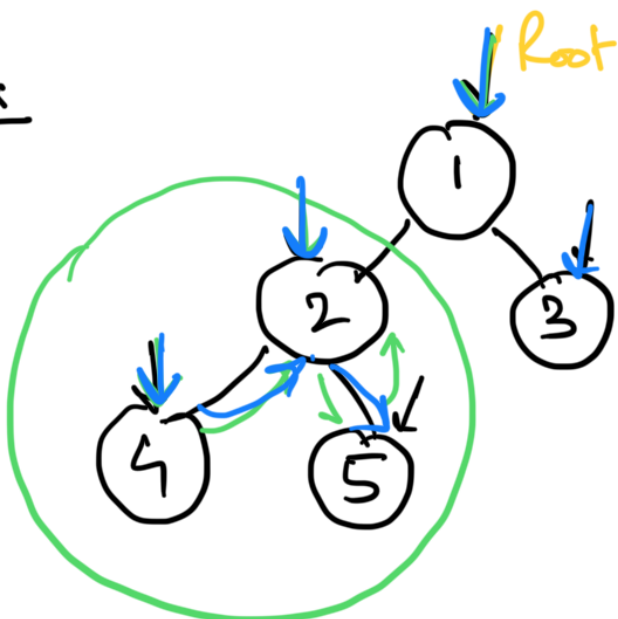3 Tree Traversals

1. Pre Order → Root, LC, RC
2. In Order → LC, Root, RC
3. Post Order → LC, RC, Root

Ex

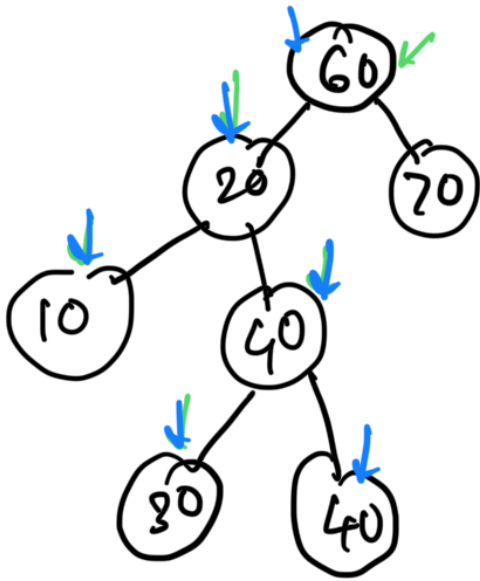Pre Order — Root, LC, RC

1, 2, 4, 5, 3

In Order — LC, Root, RC

4, 2, 5, 1, 3

Post Order — LC, RC, Root

$$4^-, 5, 2, 3, 1$$
LC RC Root

___

LC

Ex

preOrder — Root, LC, RC
___

60, 20, 10, 40, 30

40, 70

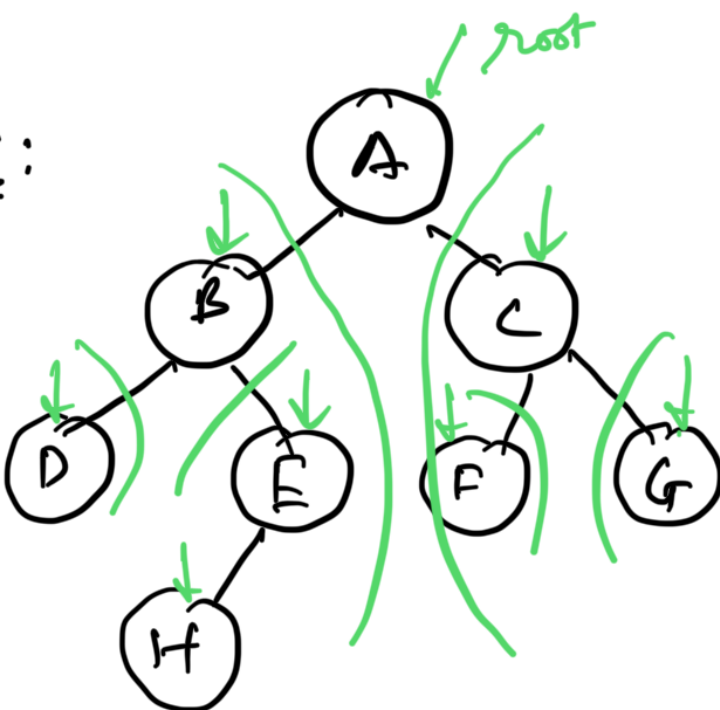InOrder — LC, Root, RC

10, 20, 30, 40, 40, 60, 70 →
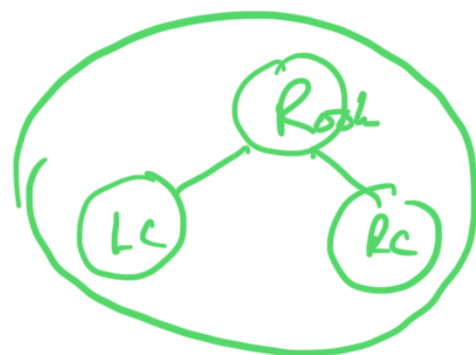___

Postorder — LC, RC, Root

10, 30, 40, 40, 20, 70, 60

Traversal →   InOrder → (sorted order)
                      Ascending
                      order
                          ↓
                    Balanced Tree
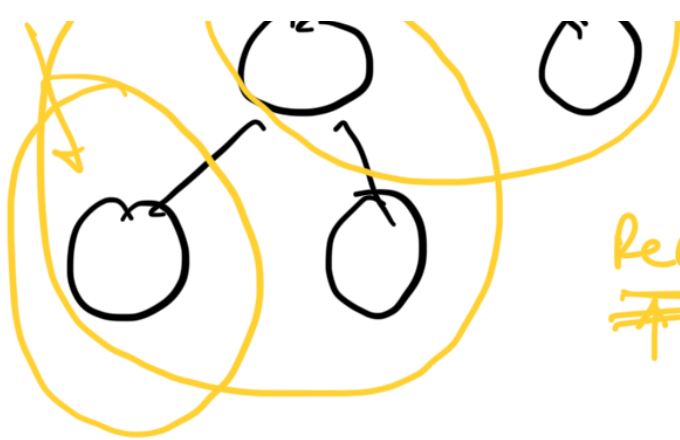   ↓
                    Appl^n used

Ex:

root

Postorder → | LC, RC, Root

D, H, E, B, F, G
C, A

f^n

Order → root,
LC,
RC

Recursive function

Preorder ( )

InOrder ( )

Postorder ( )

↑

Recursive function.

Iterative fo

length