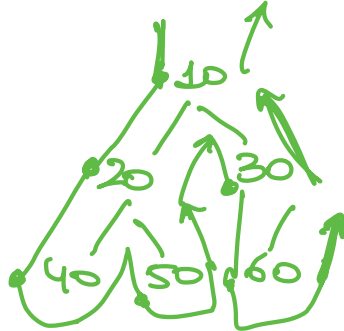


TREE TRAVERSALS

Preorder : Hi : visiting node first time

Inorder : left child to right child

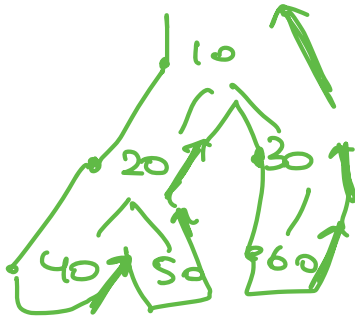
Postorder : Bye: visiting node last time



Preorder: 10 20 40 50 30 60



Inorder: 40 20 50 10 60 30



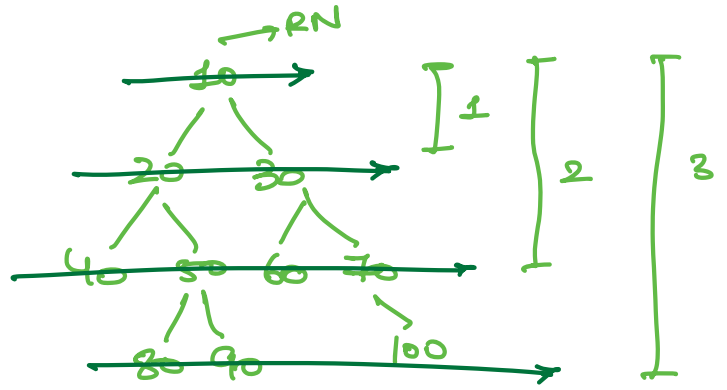
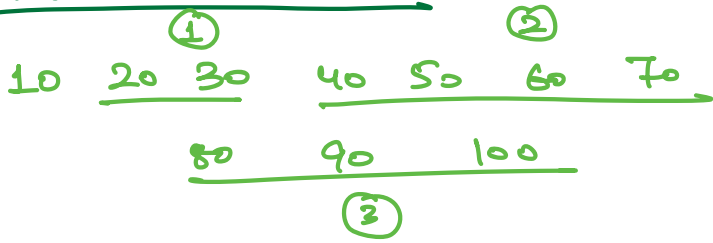
Postorder: 40 50 20 60 30 10



Pre, In, Post: Rec
Stack

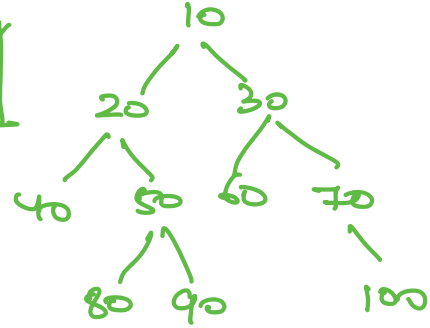
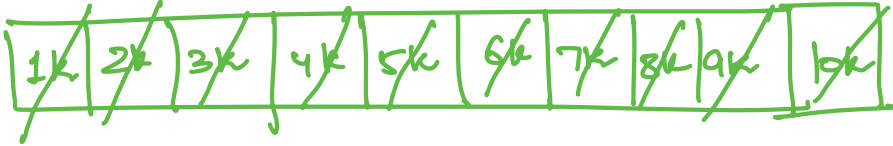
Depth: Stack
Breadth: Queue

Level Order Traversal



loop

Queue → Node addresses



10 20 30 40 50 60 70

80 90 100

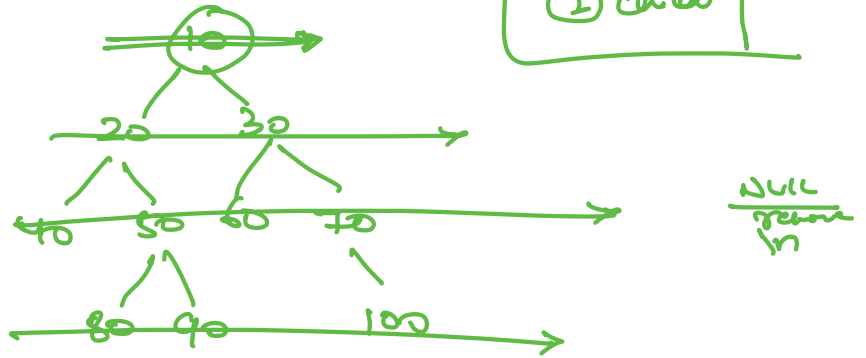
Level Order Line wise

10

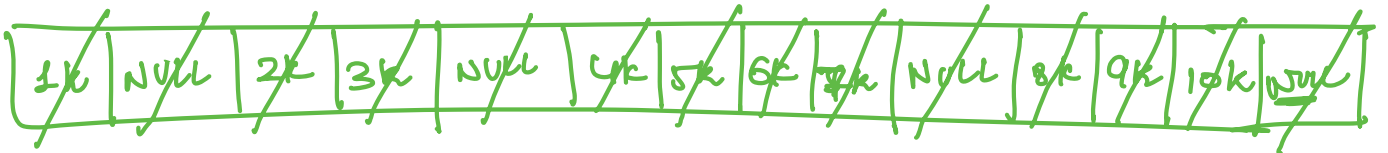
20 30

40 50 60 70

80 90 100



- ① Remove
- ② print
- ③ child



10

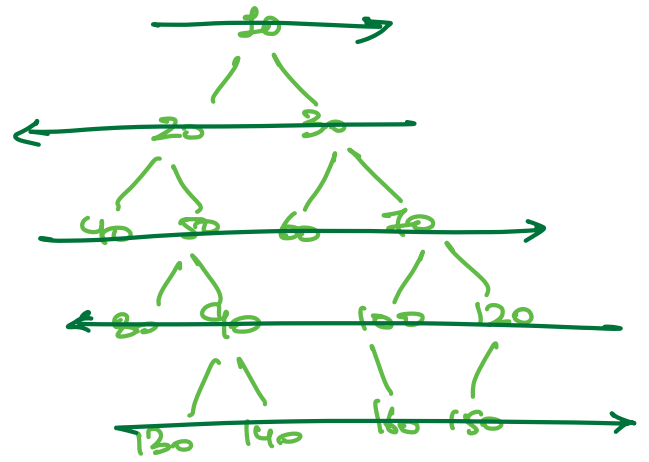
20 30

40 50 60 70

→ 80 90 100

Leulorder zigzag

10
 30 20
 40 50 60 70
 120 100 90 80
 130 140 160 150



Diameter

↓

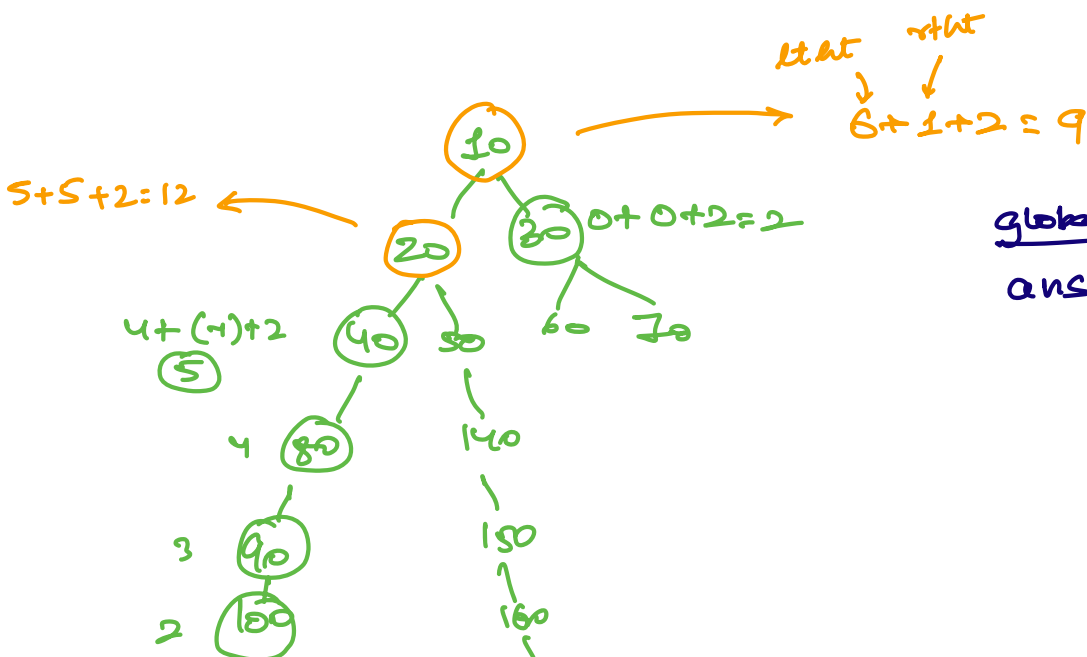
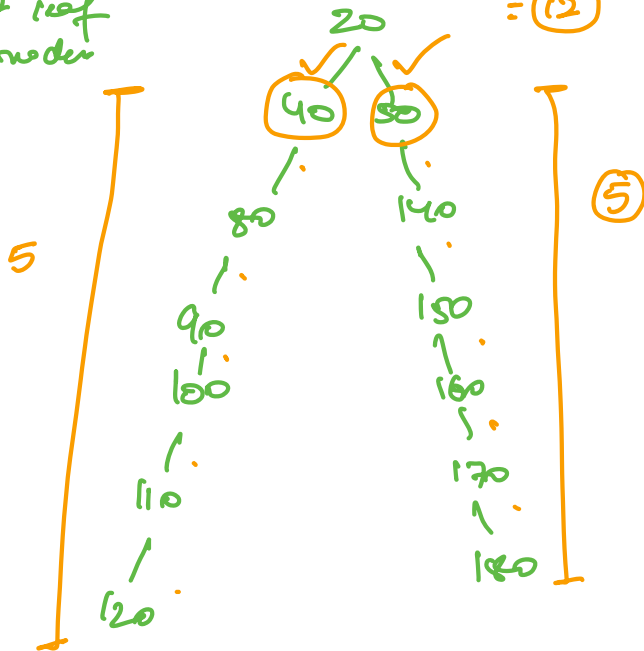
max distance possible

bles omg 2 leaf nodes

$$l + l + r + l + 2$$

$$5 + 5 + 2$$

$$= 12$$



global var:

ans = ~~9~~
 12

