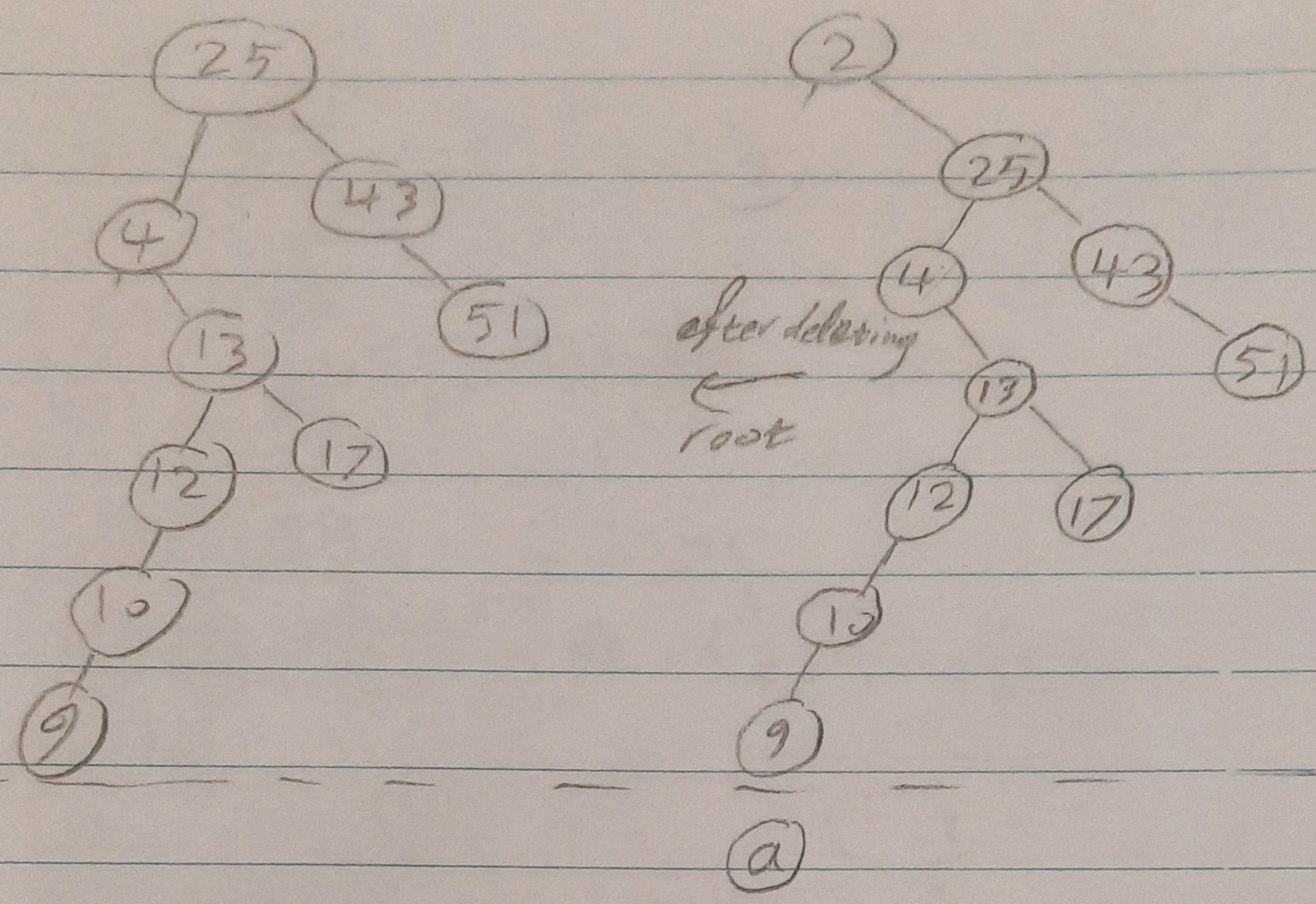
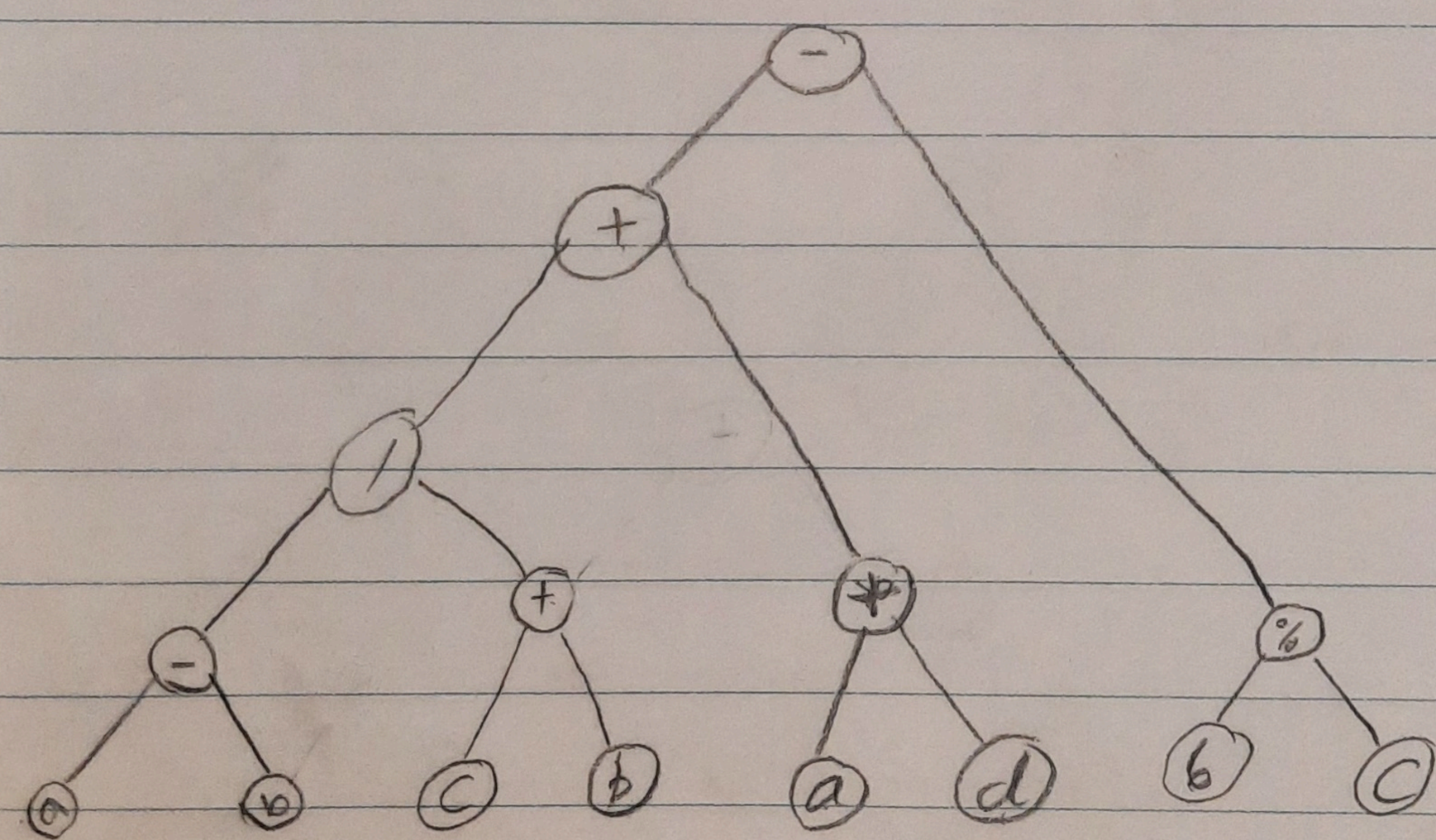
Amir mahdi Abravesh

1

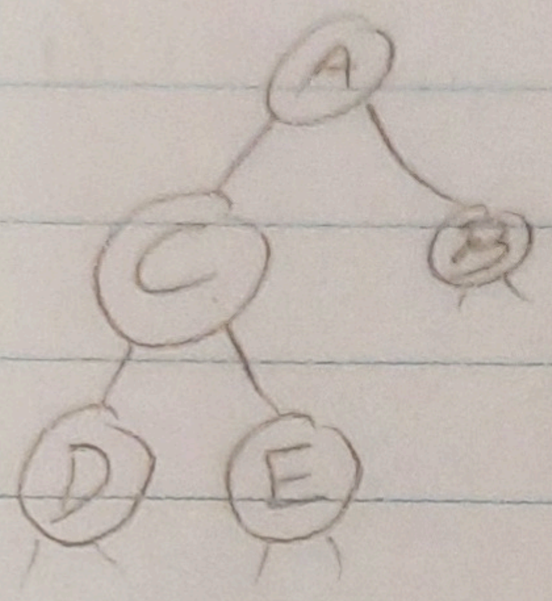


a

2



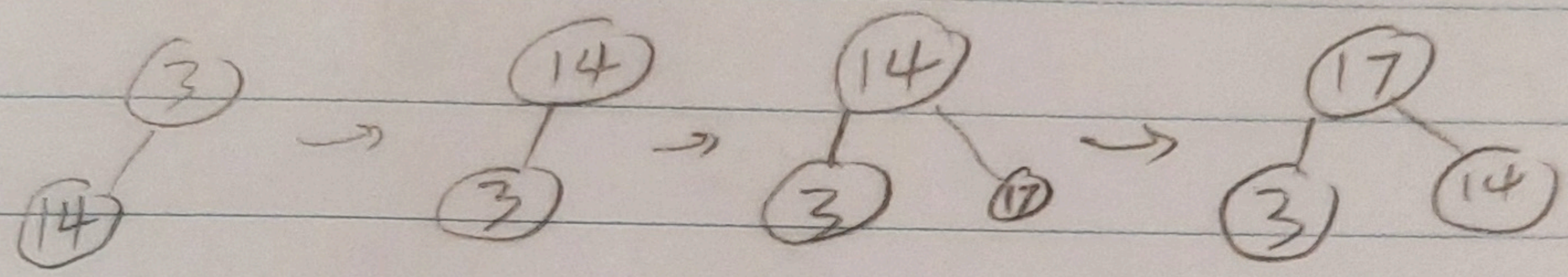
ab - cb + / ad * + bc % -



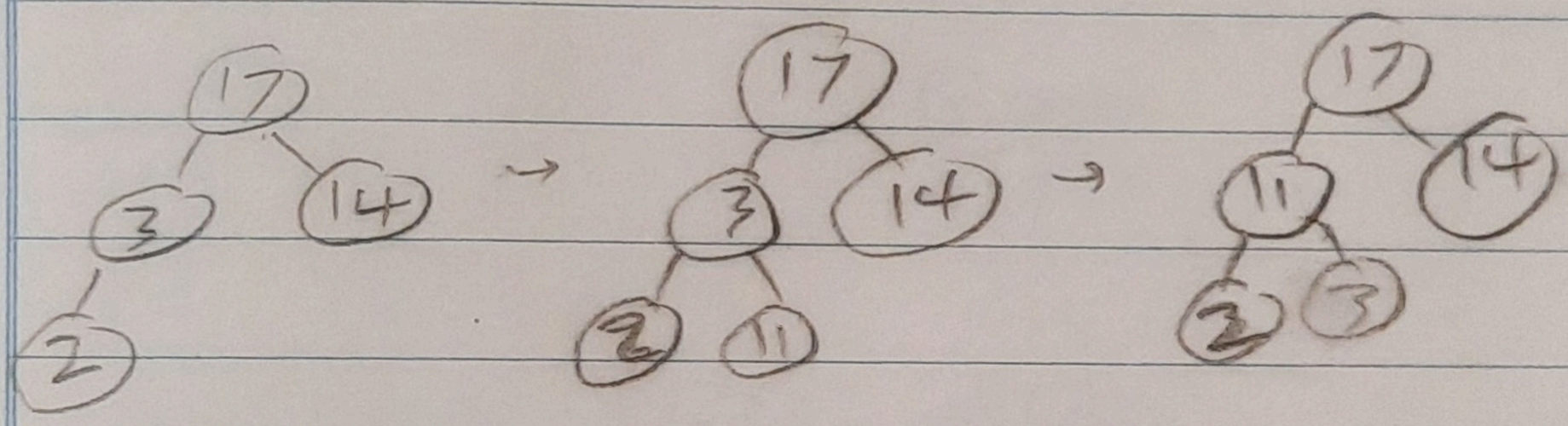
$N = 5$

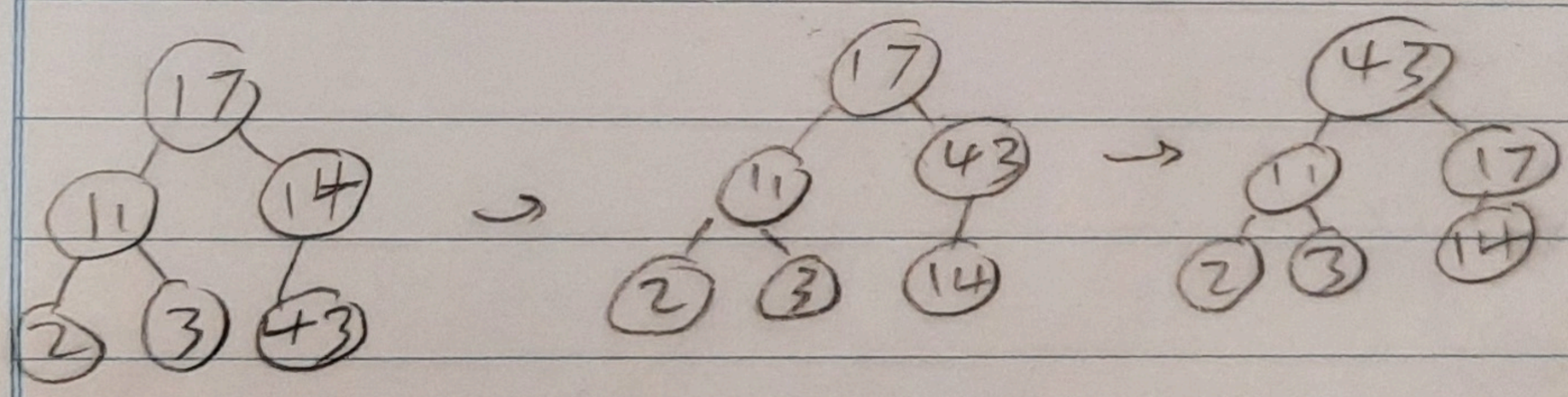
$L = 6$ $\rightarrow L = N+1$

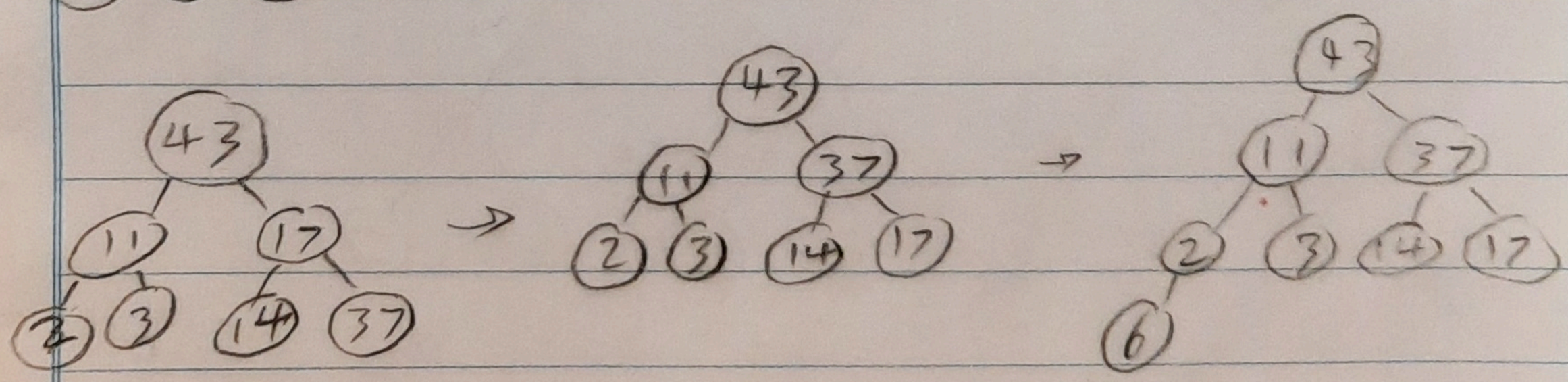
(3)

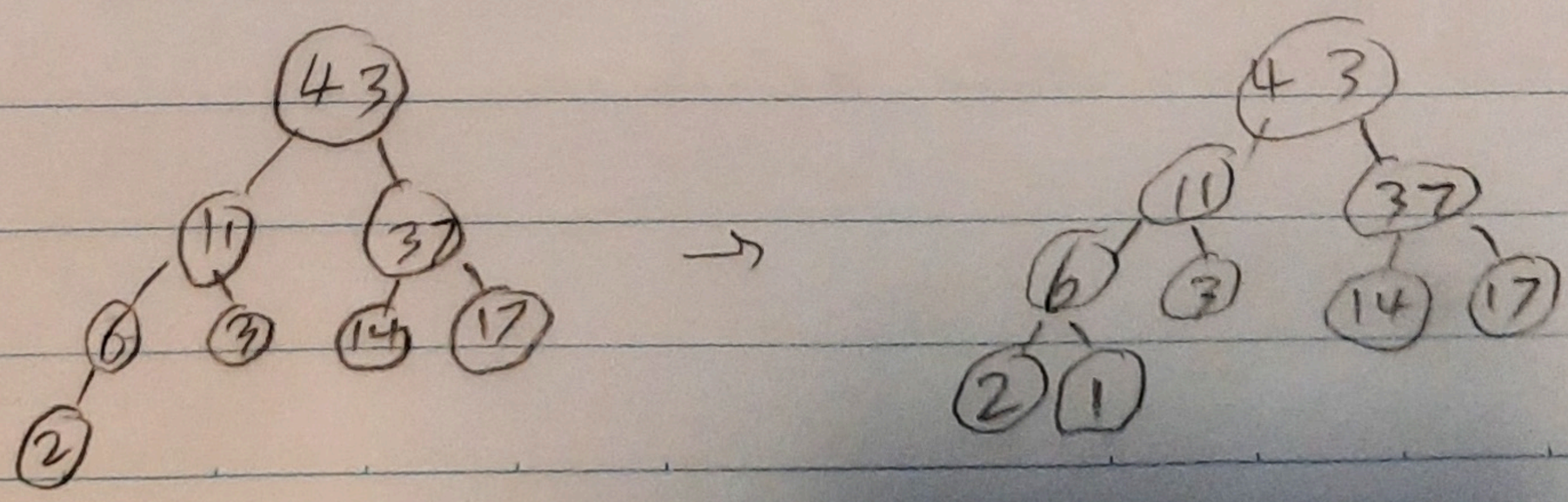


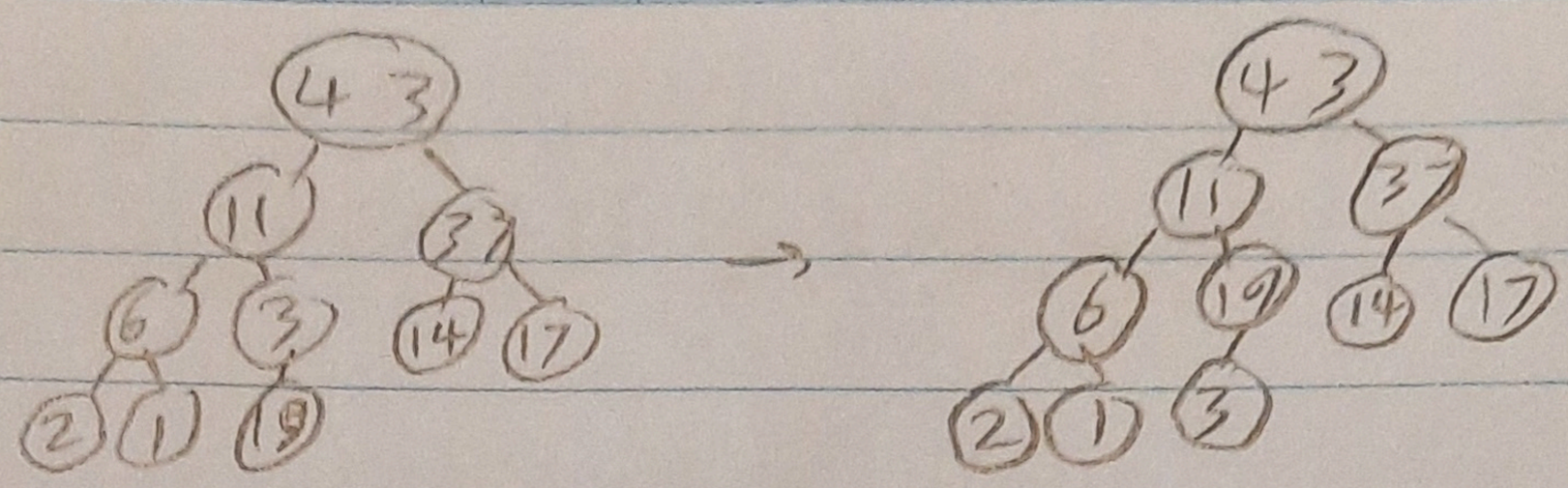
(4)

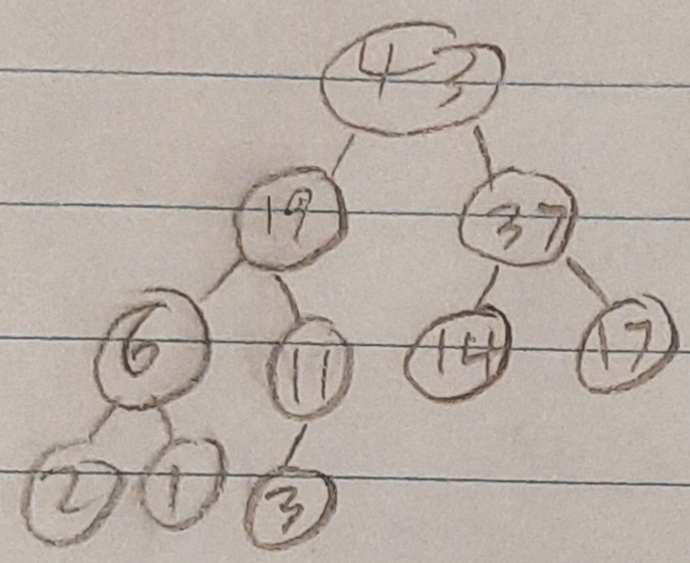




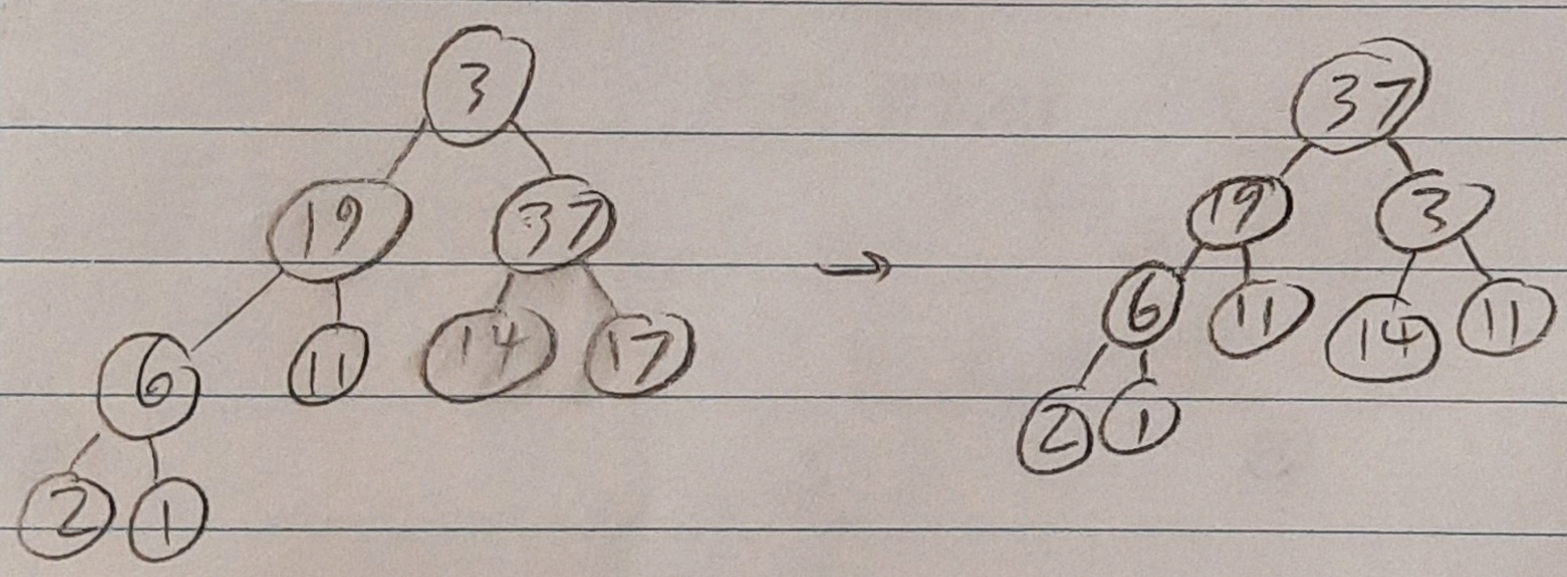


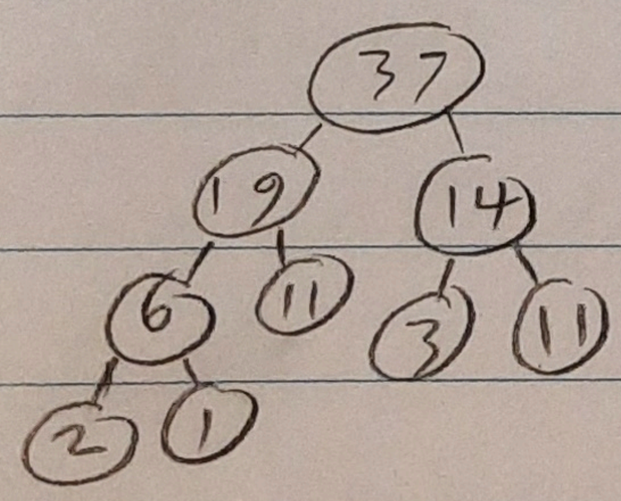






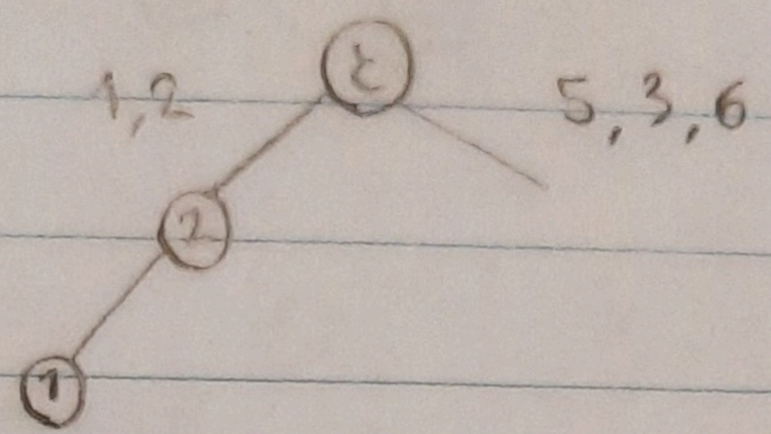
43, 19, 37, 6, 11, 14, 17, 2, 1, 3





PreOrder : 1, 2, 5, 1, 3, 6 VLR (5)

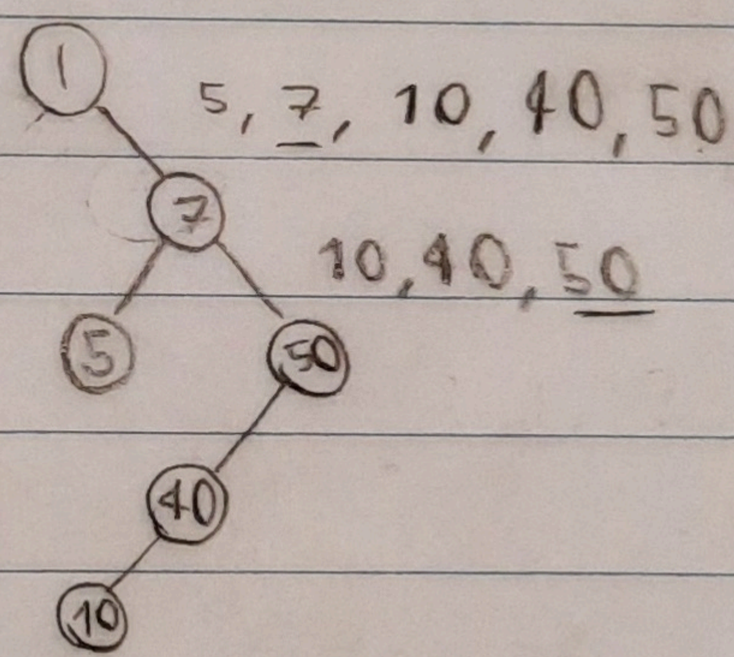
InOrder : 1, 2, 4, 5, 3, 6 LVR



× سوال غلط است

postorder : 10, 40, 50, 5, 7, 1 LRV (6)

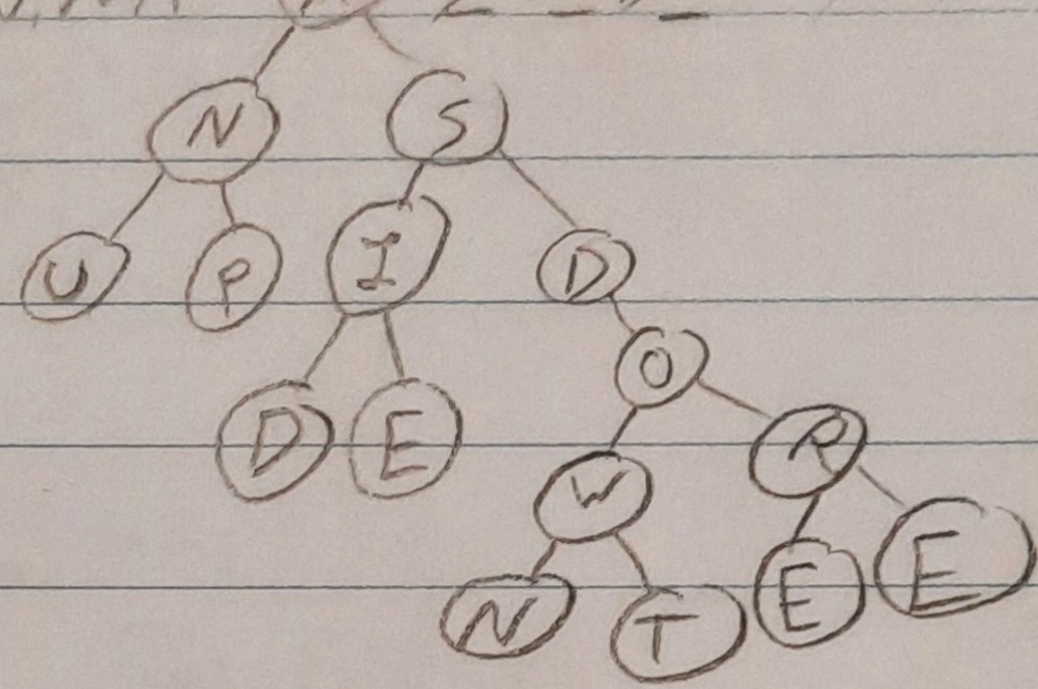
Inorder : 1, 5, 7, 10, 40, 50 LVR



preorder: ANUPSIDEDOWNTREE VLR (7)

Inorder: UNPADIESDNWTOERE LVR

U,N,P (A) D,I,E,S,D,N,W,T,O,E,R,E



A) (8)

preorder (VLR): 2, 7, 2, 6, 5, 11, 5, 9, 4

Inorder (LVR): 2, 7, 5, 6, 11, 2, 5, 4, 9

postorder (LRV): 2, 5, 11, 6, 7, 4, 9, 5, 2

Level order: 2, 7, 5, 2, 6, 9, 5, 11, 4

B)

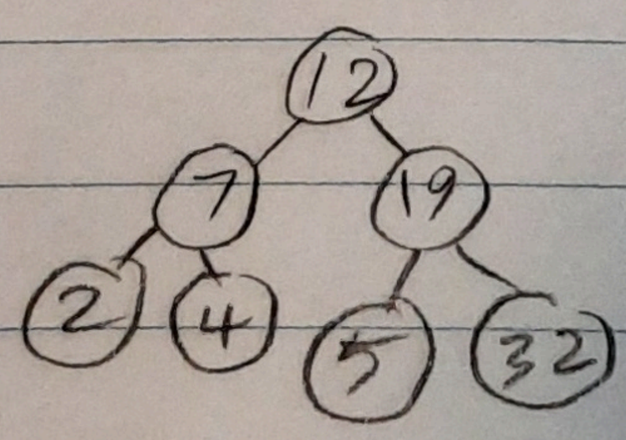
preorder (VLR): a, b, d, e, c, f, g

Inorder (LVR): d, b, e, a, c, g, f

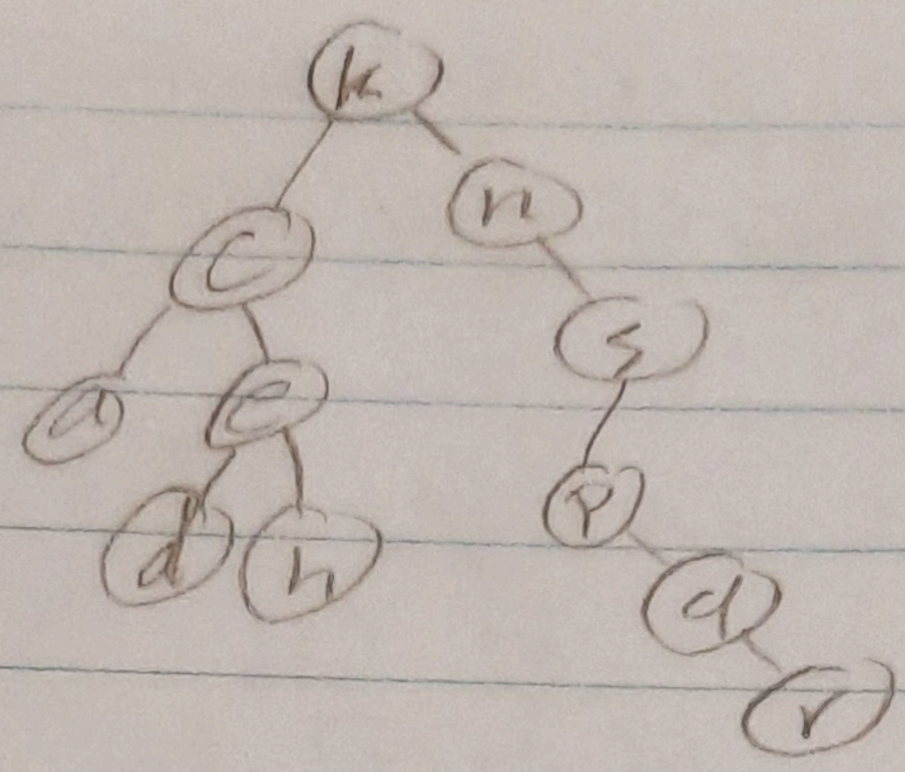
postorder (LRV): d, e, b, g, f, c, a

level order: a, b, c, d, e, f, g

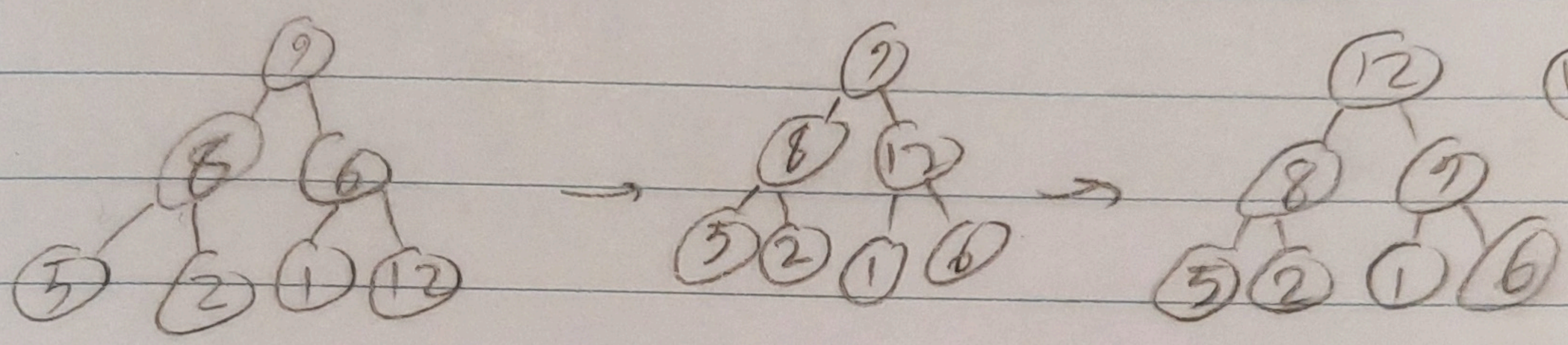
(9)



(10)



(11)



(12)

100, 19, 36, 17, 3, 25, 1, 2, 7

(13)

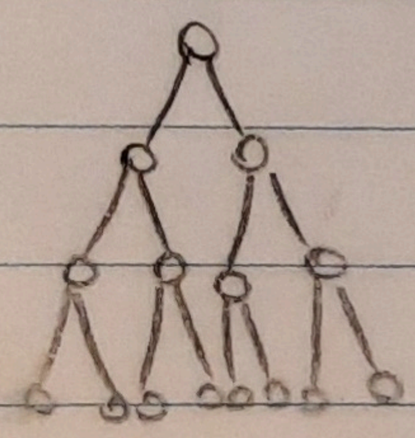
preorder (VLR): 100, 19, 17, 2, 7, 3, 36, 25, 1

Inorder (LVR): 2, 17, 2, 19, 3, 100, 25, 36, 1

Postorder (LRV): 2, 7, 17, 3, 25, 1, 19, 36, 100

levelorder: 100, 19, 36, 17, 3, 25, 1, 2, 7

(14)

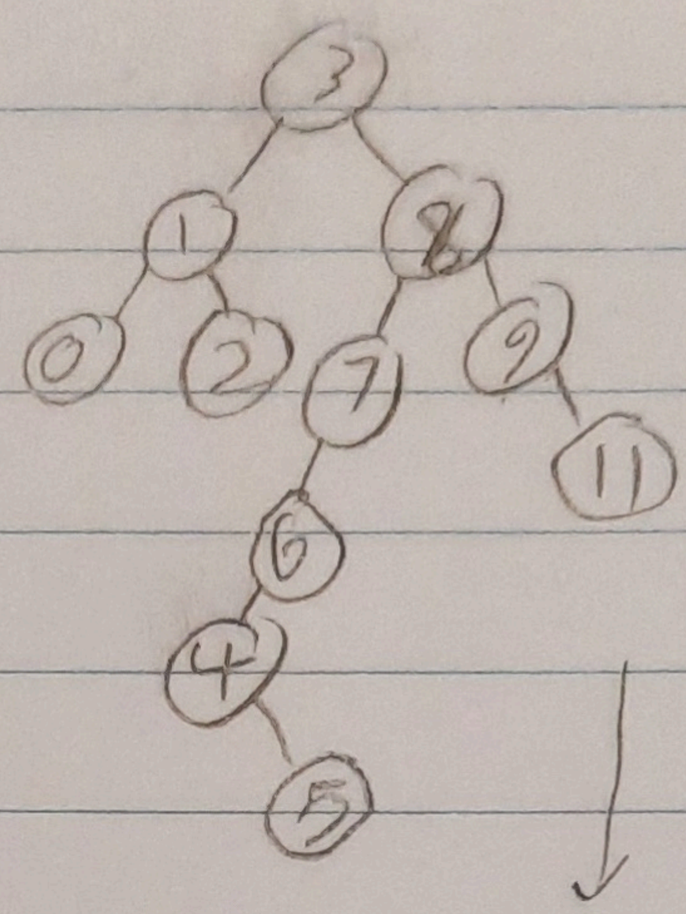


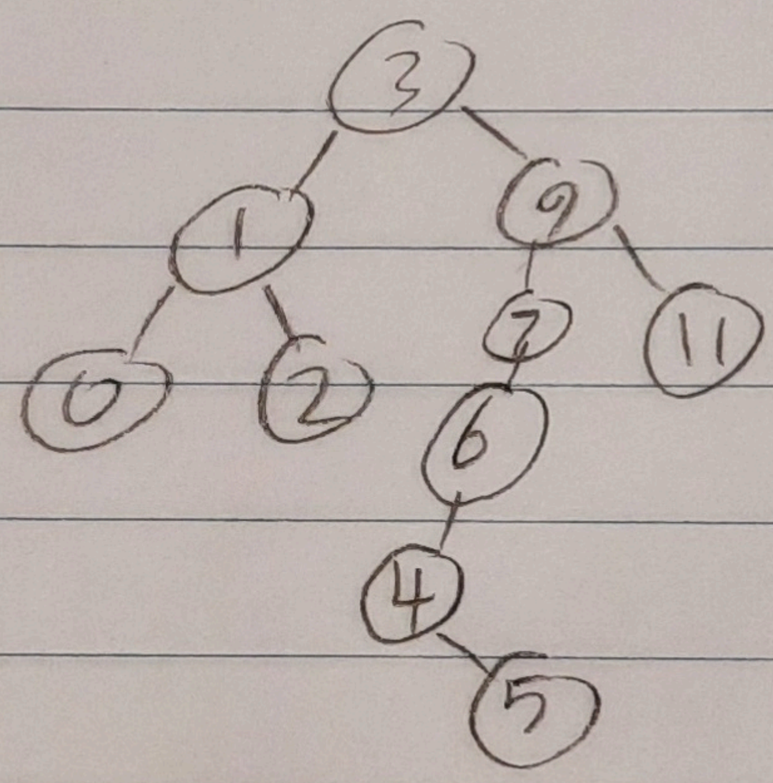
۱	$۲^{۱}-۱$	$\rightarrow$ $۲^{n}-۱$
۳	$۲^{۲}-۱$	تعداد سطوح
۷	$۲^{۳}-۱$	
۱۵	$۲^{۴}-۱$	$۲^{L}-۱$

$$۲^{L-1}-۱ < n < ۲^{L}-۱ \rightarrow ۲^{L-1} < n+1 < ۲^{L} \rightarrow$$

$$L-1 < \log_{۲} n+1 < L$$

15





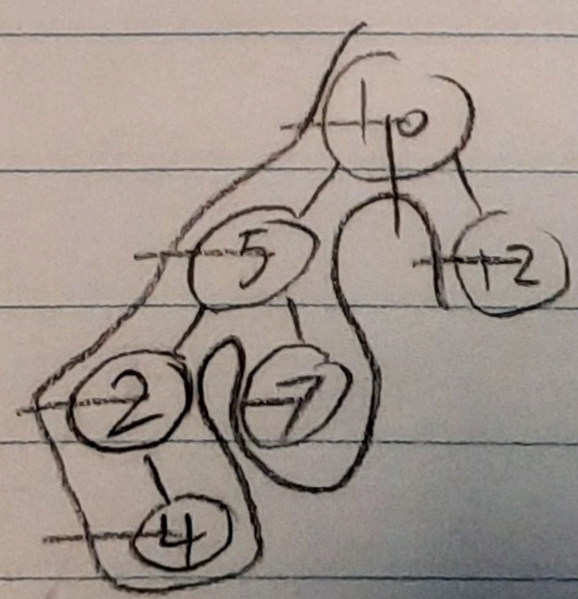
16

preorder(VLR): 10, 5, 2, 4, 7, 12

Inorder(LVR): 2, 4, 5, 7, 10, 12

Postorder(LRV): 4, 2, 7, 5, 12, 10 LRV

nodes: 7, 12, 2, 5, 10, 4

PreOrder VLR

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