4/4/20 Data Structures Yashwanth.

Quiz

(1) In Order - A K B J C L D E H G F I

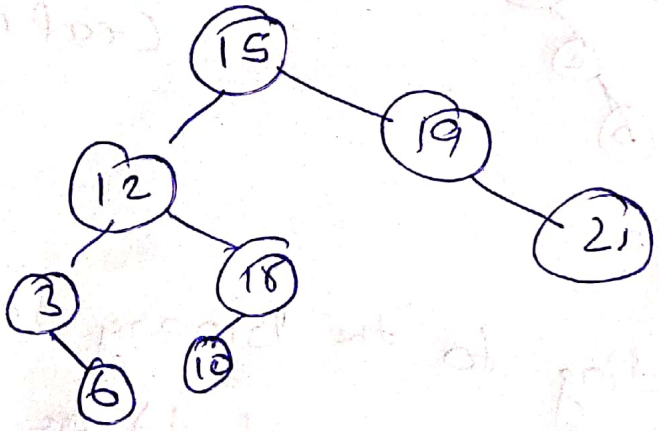
(2) Pre Order - L, K, A, J, B, C, I, H, E, D, F, G

(3) Post Order - A, B, C, J, K, I, D, E, F, G, H, L

Breath First Order -

L K I H A J E F G B C D.

(2) The final tree would be



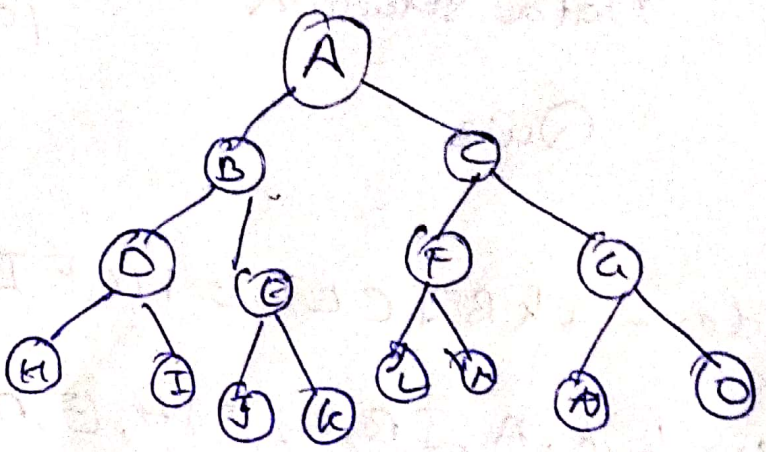
This is not AVL Tree.

(3) Height of the tree - 3

The largest number of node - $2^{n+1} - 1$

$= 15$

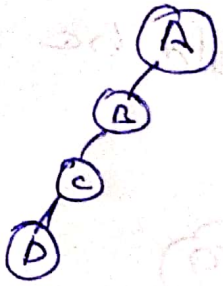
Smallest number of node - $2^{n-1} = 4$



Internal Node - B C D E F G

Leaf Node - H I J K L M N O

The with smallest number of Nodes;



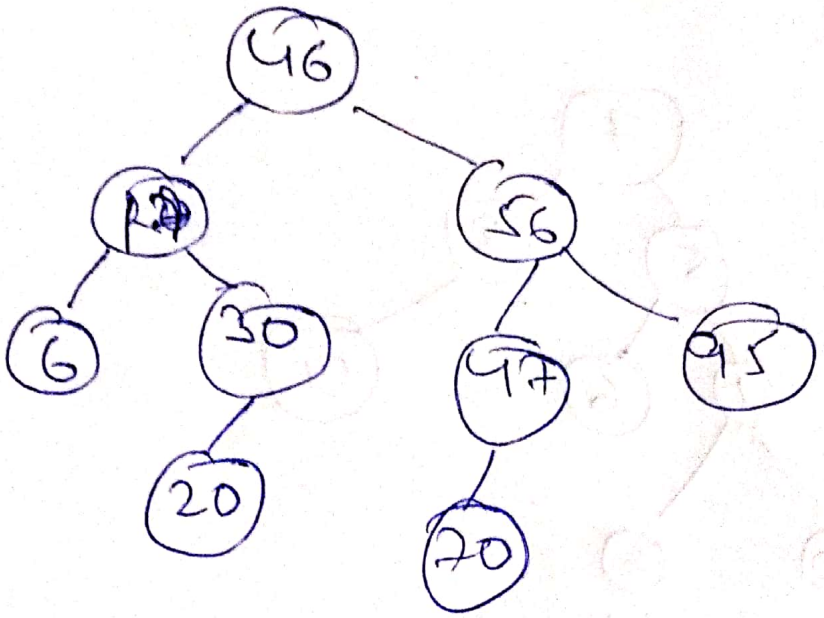
→ Internal node - A B C

Leaf Node - D

(4) False.

According to the Binary search, the left children should be less than Root node. Root Node Should be less than Right children.

Eg:-



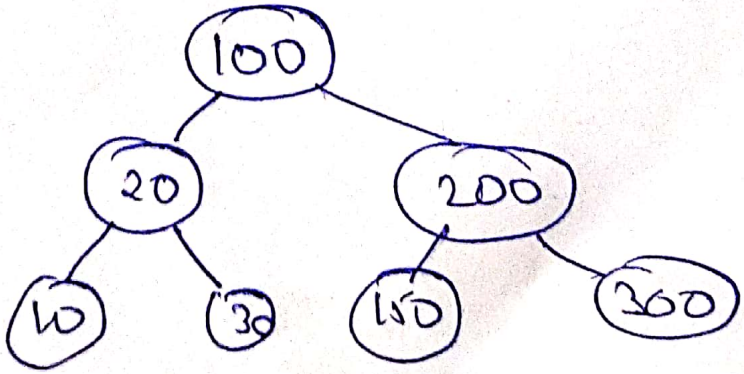
As you we can see in the above Ex, 6 is the smallest number which will not be printed first according to the post order traversal.

Post order - 46 17 6 24 20 56 47 95 70

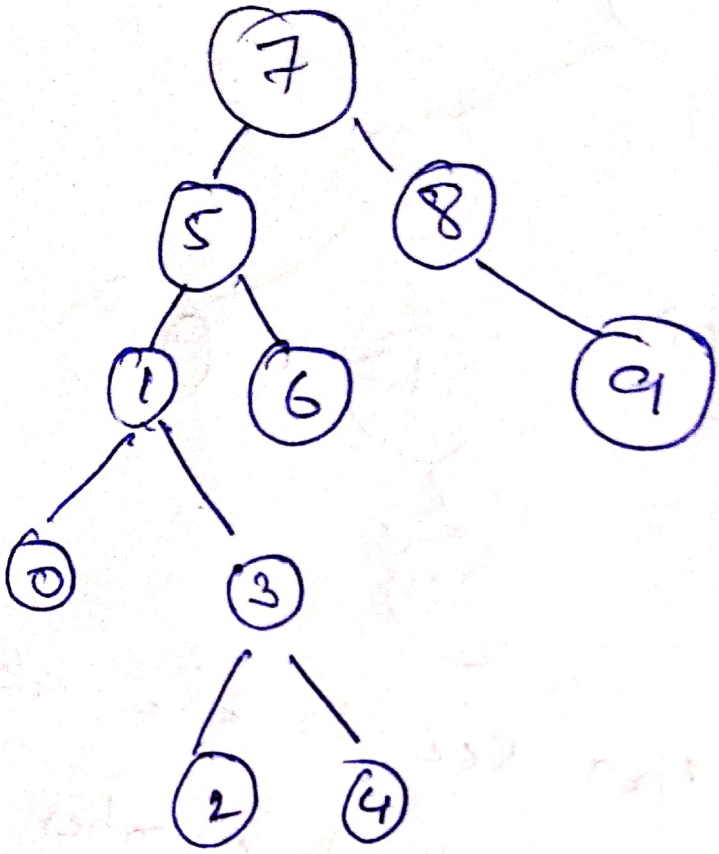
(5)

2	3	5	10	8	7	22	11	13	20	24	16	Null	Null	...

(6)



7



Option - 3

0, 1, 2, 3, 4, 5, 6, 7, 8, 9.

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1