Data Structure Assignment.

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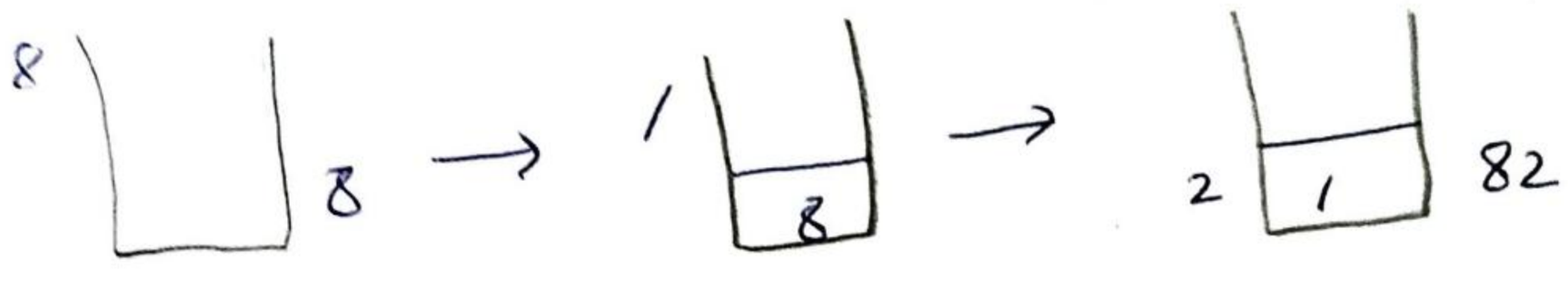
Date : 23.09.16

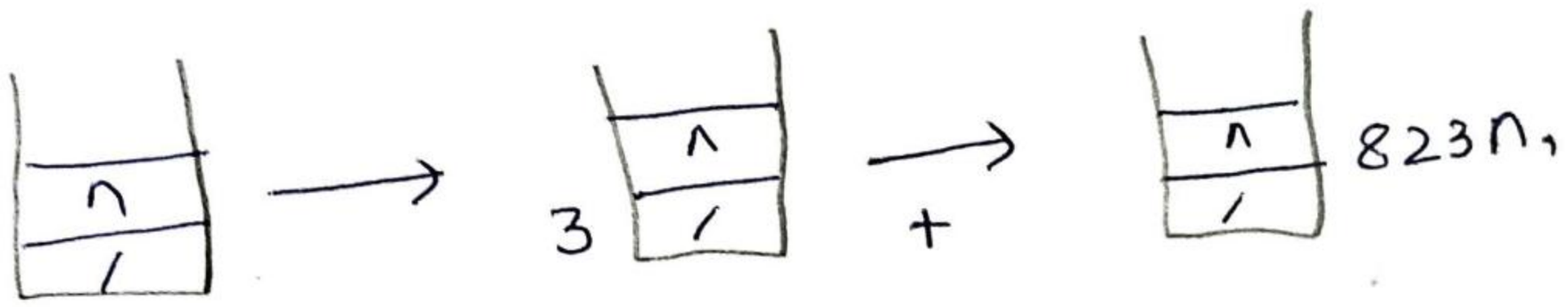
Sub : DS.

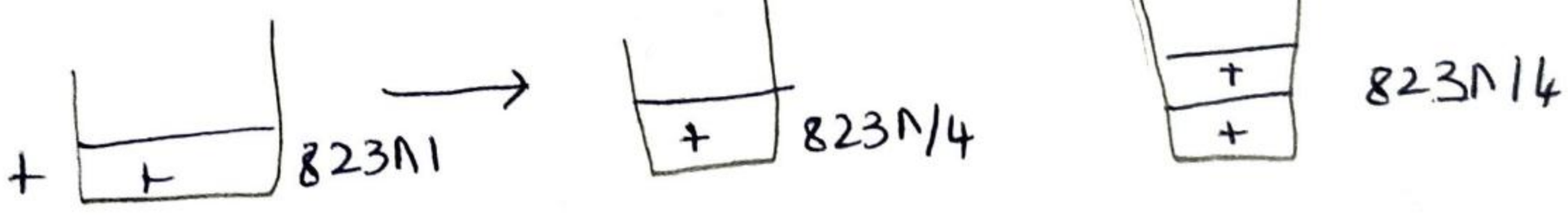
3.5

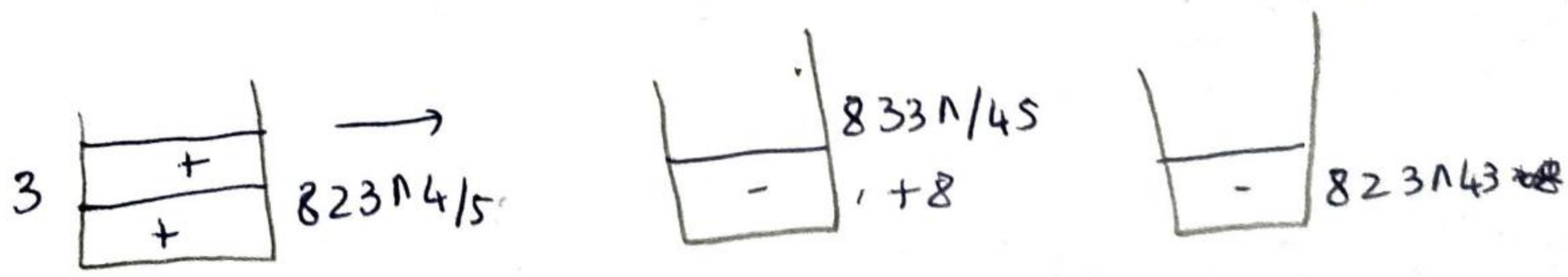
Sanjeev

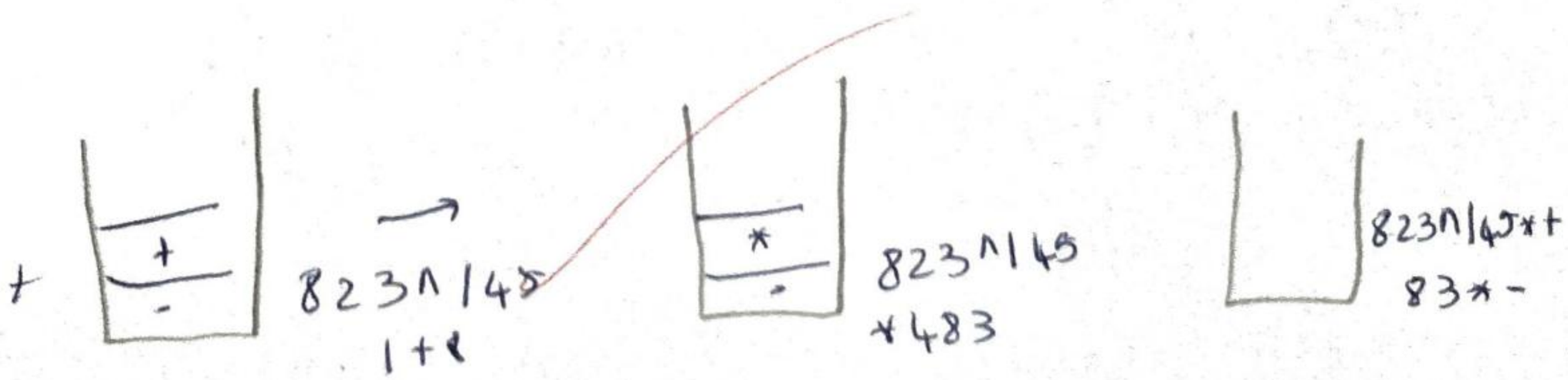
Convert the following infix expression to Postfix expression and also evaluate the same 8/2^3+4*5-8*3









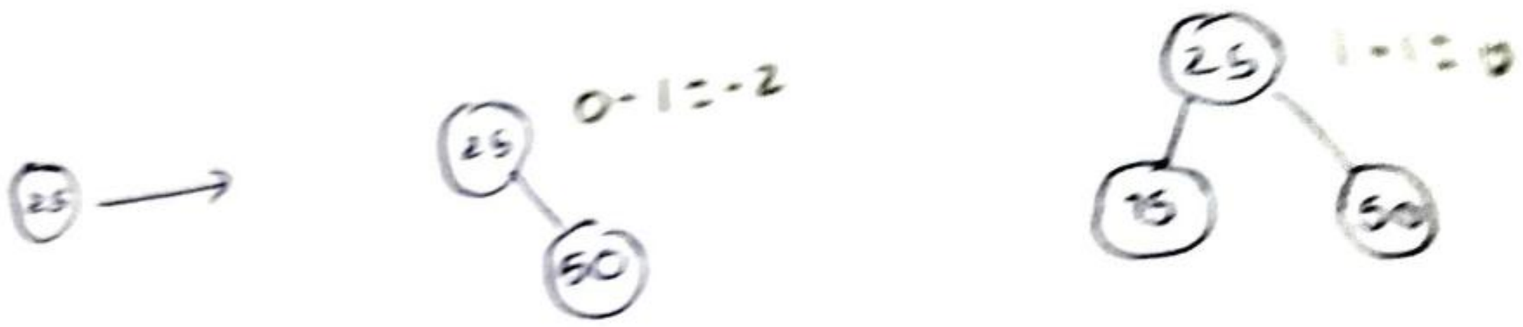


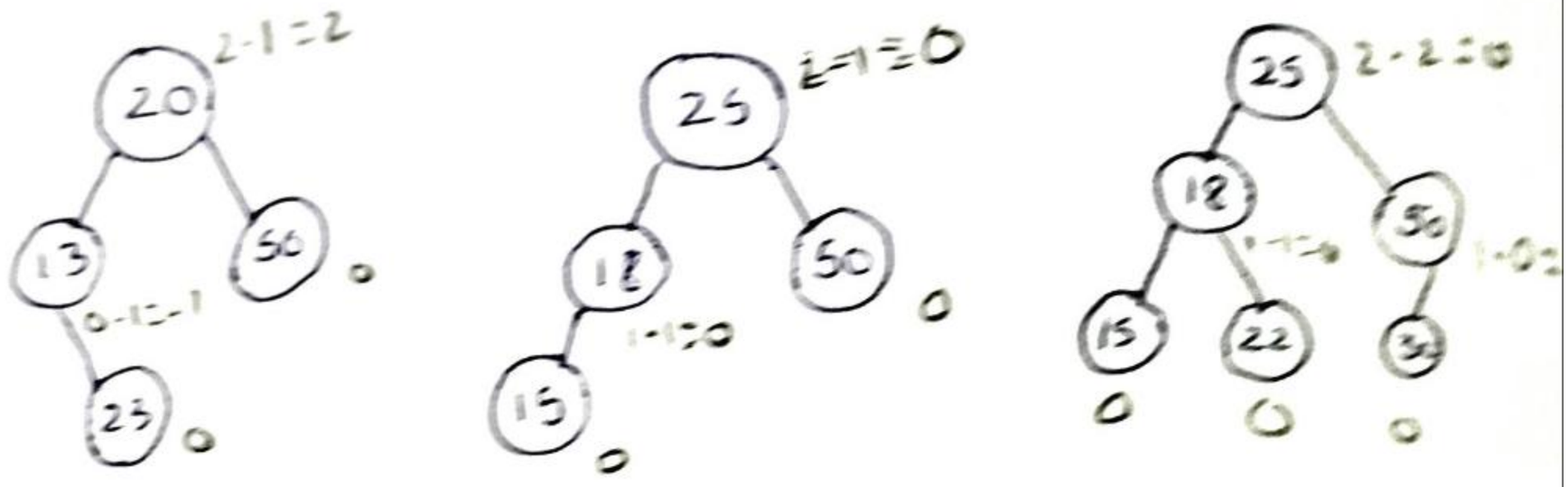
Ans 823^/45*+83*-

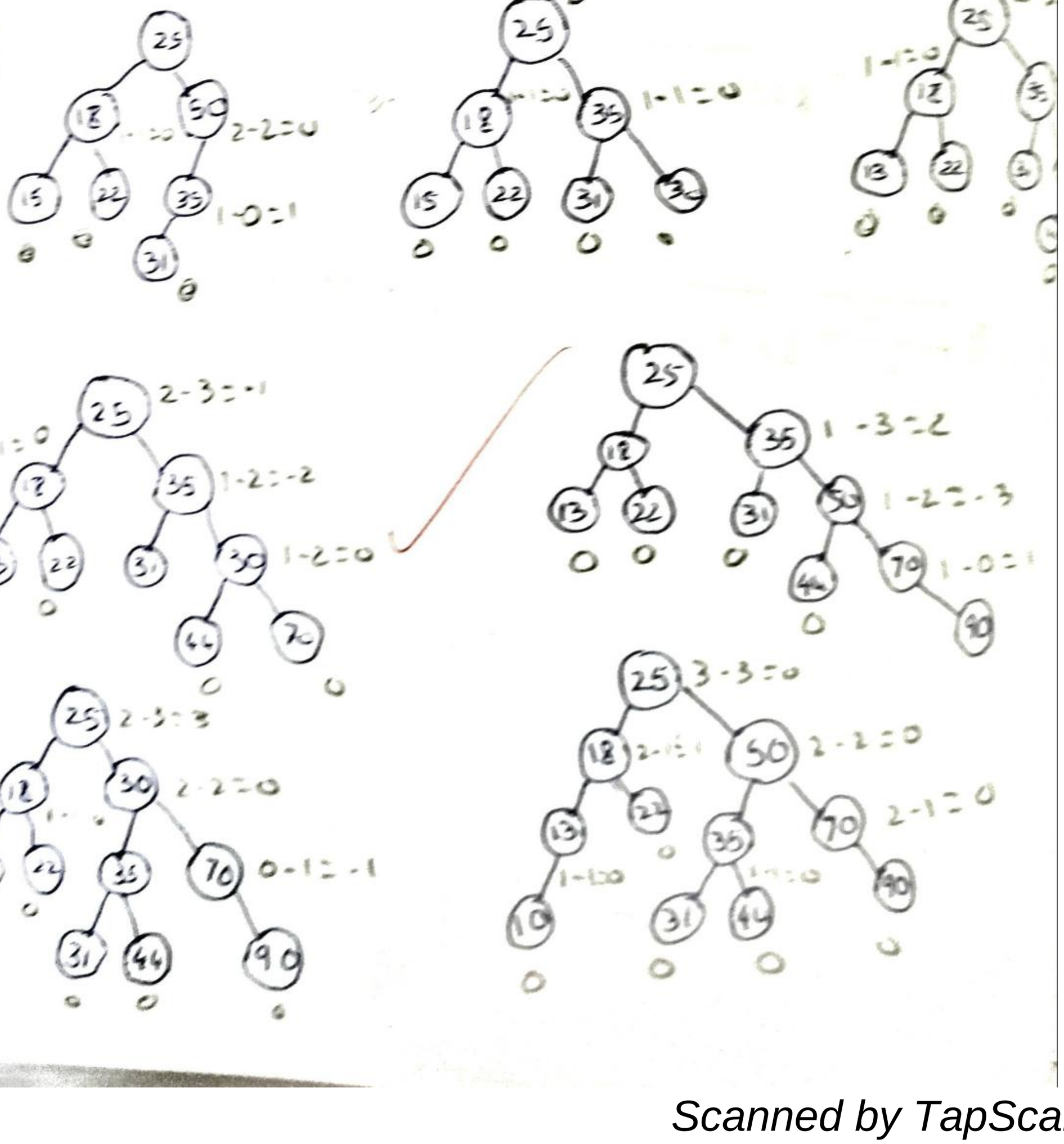
2) Construct a Binary search tree for the

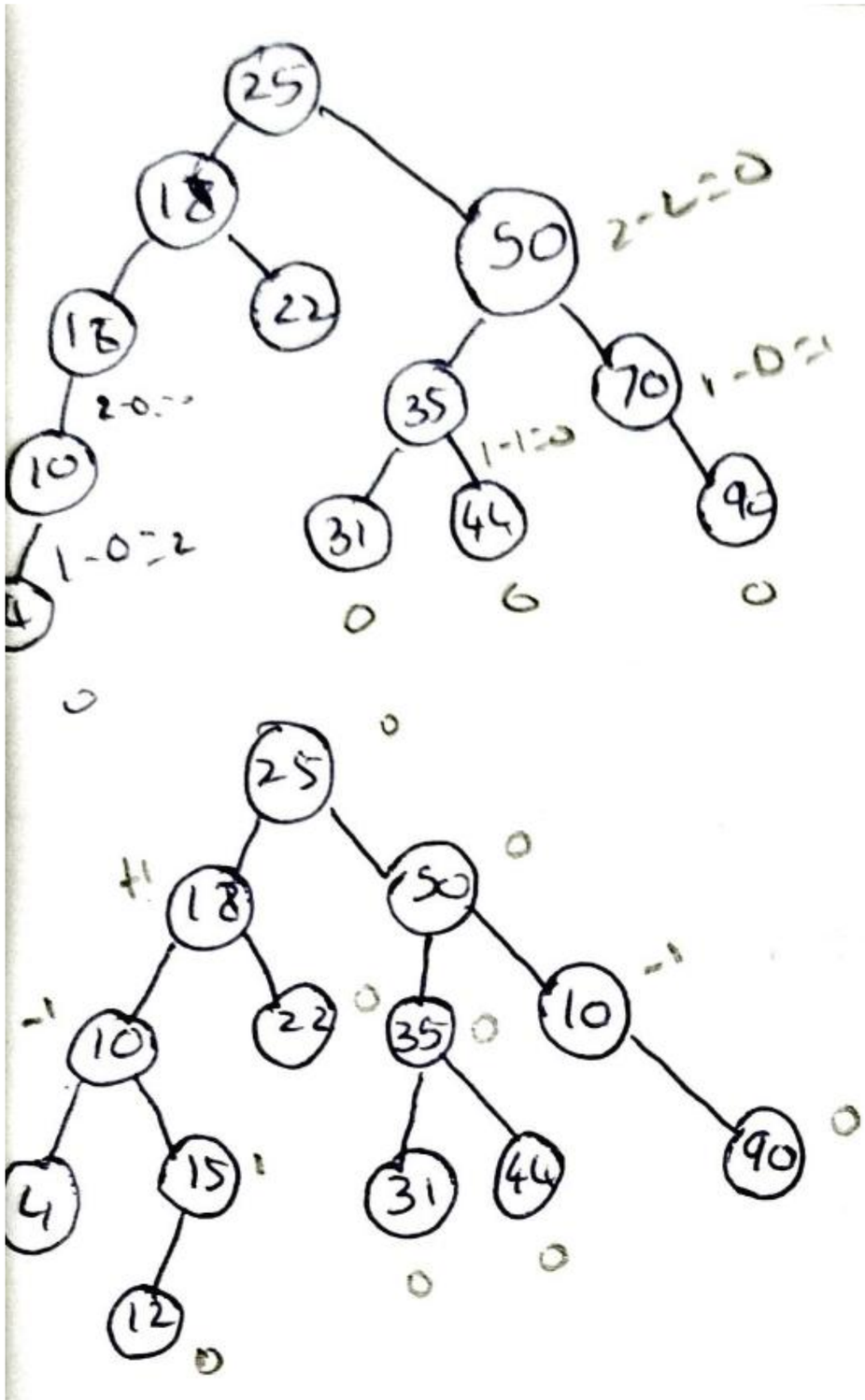
data

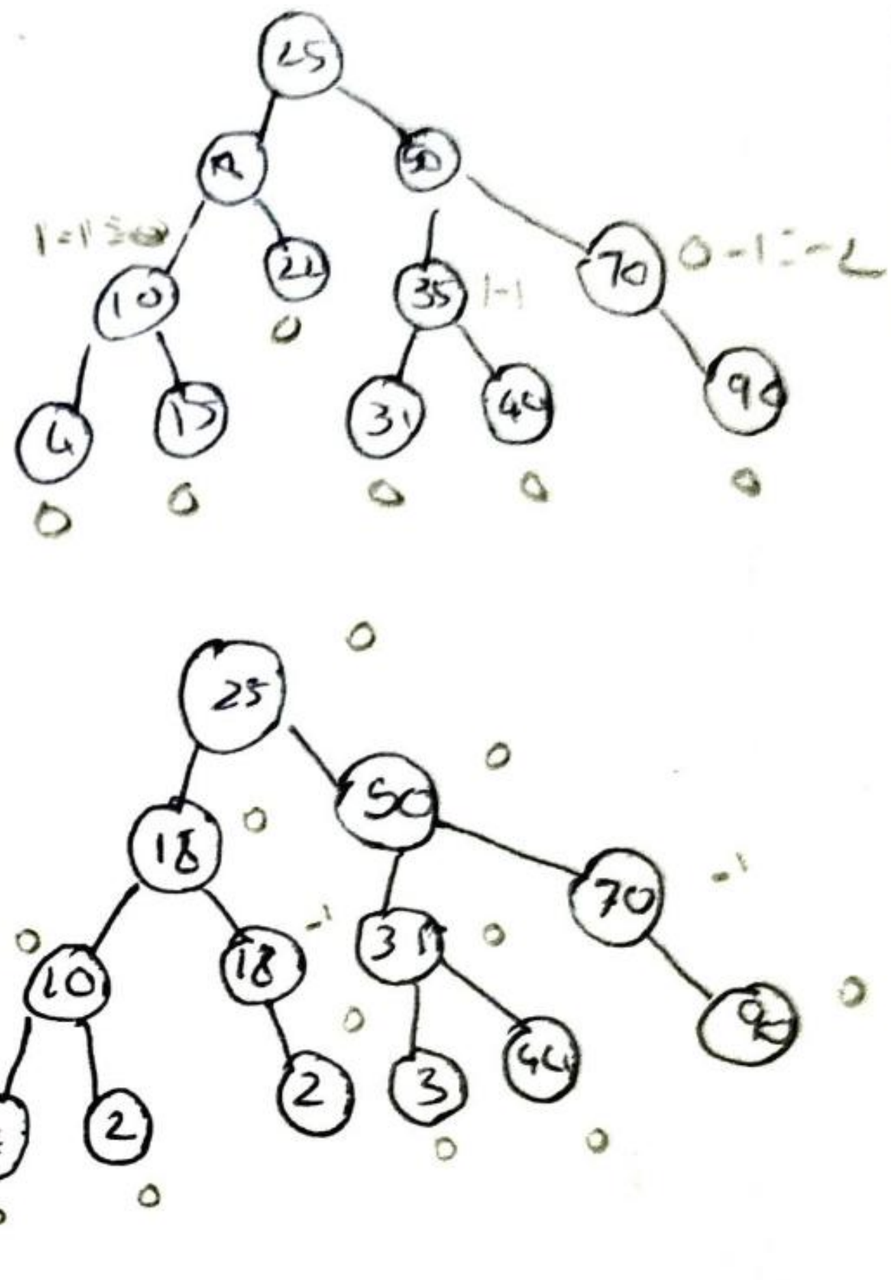
25 50 15 22 18 35 32 44 70 90 90 10

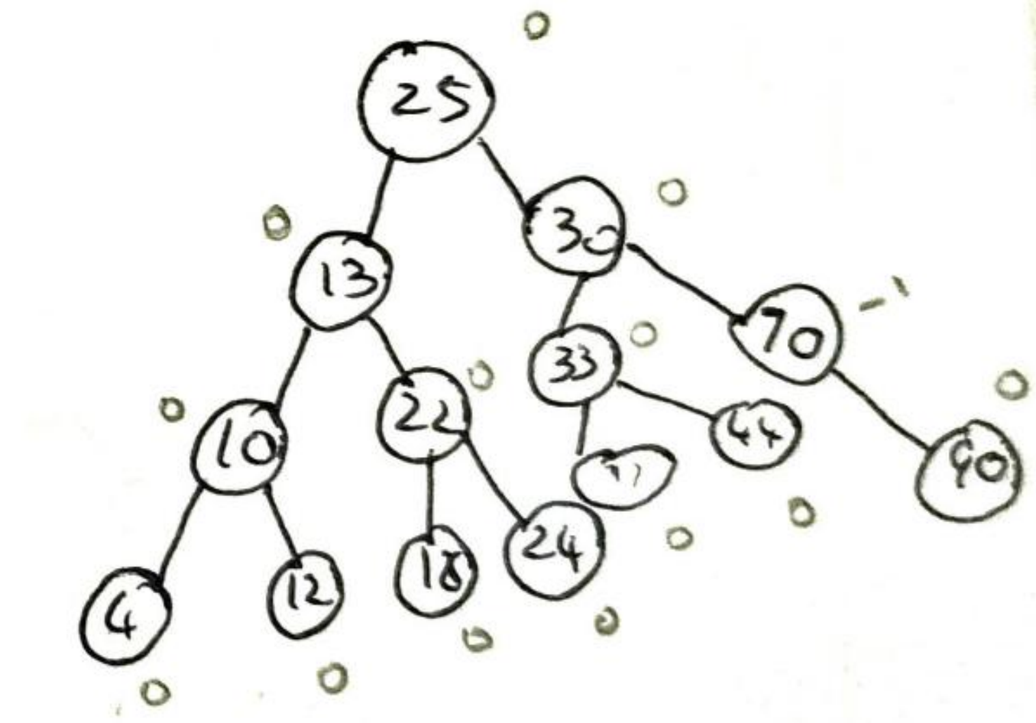


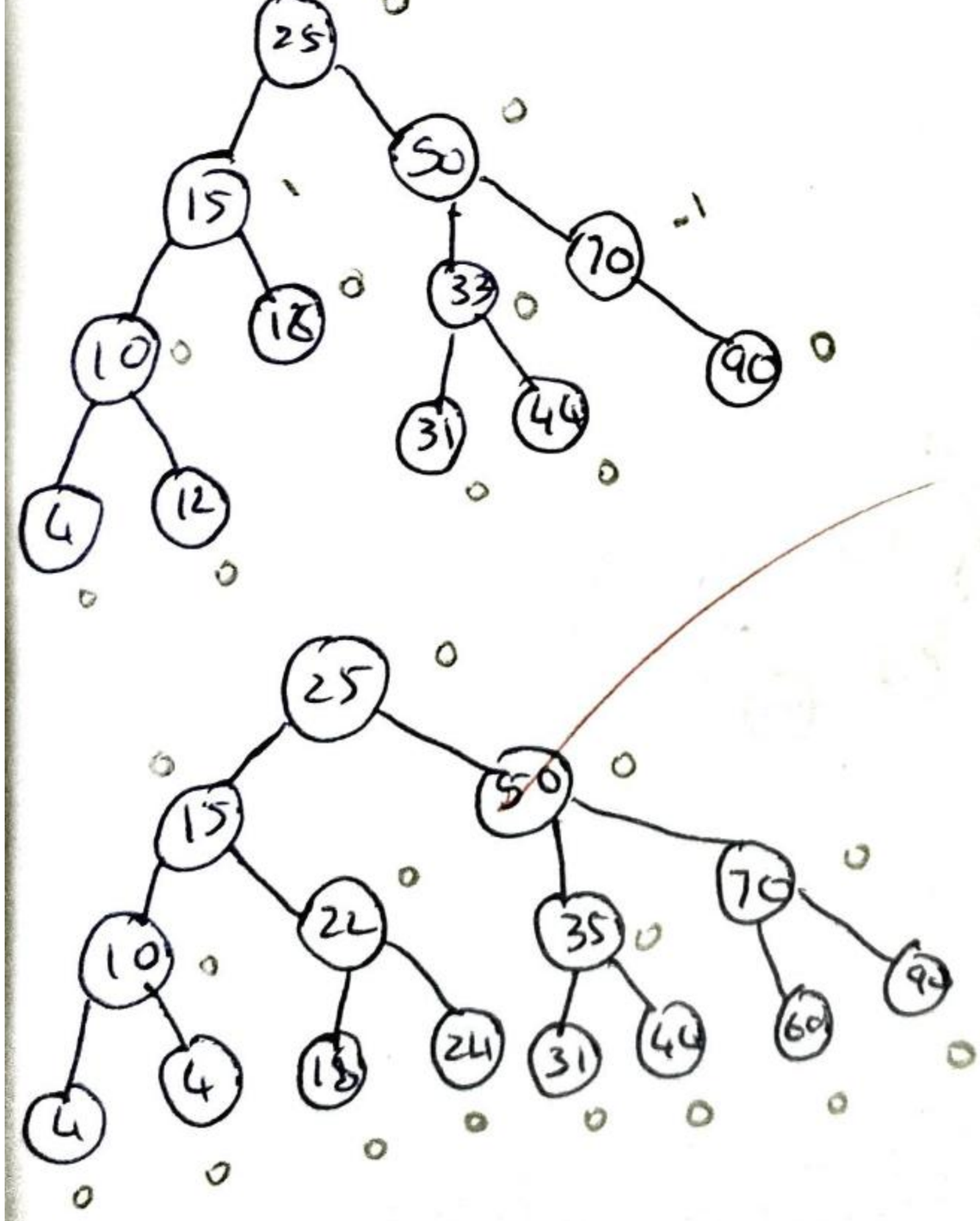












Answer

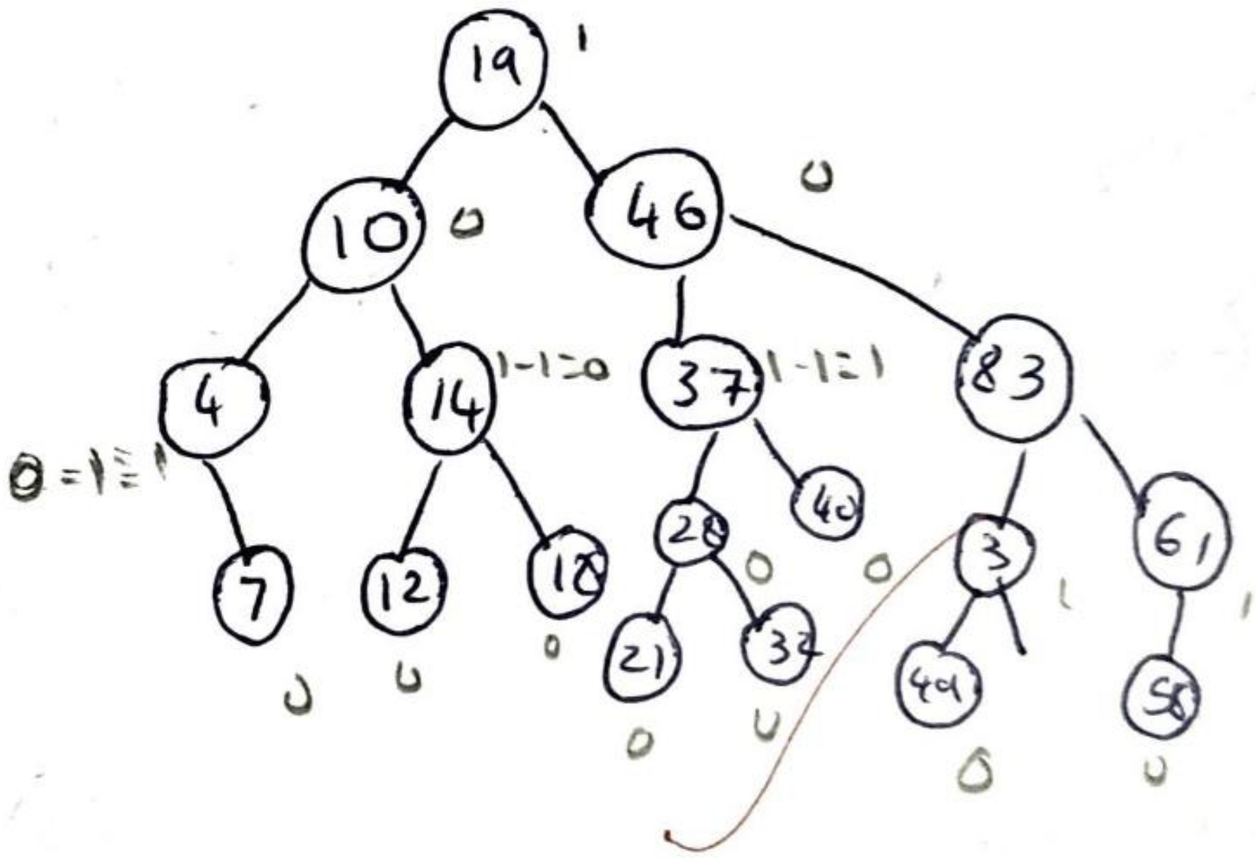
3. Transverse the above binary tree using in-order, Pre order, post order tree traversal

Inorder :- 4 10 12 15 18 22 24 25 31
35 44 50 66 70 90

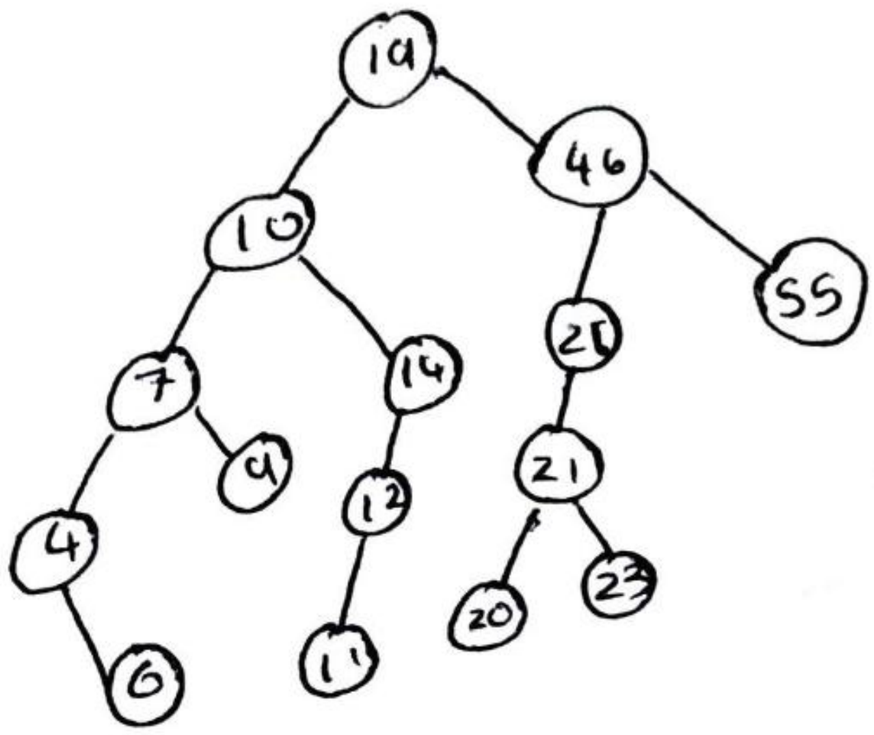
Pre order :- 25 15 10 4 12 222 18 24 50
35, 32, 44, 70, 66, 90

Post order :- 4 12 10 18 24 22 25 31 44
33 66 90 70 50 25

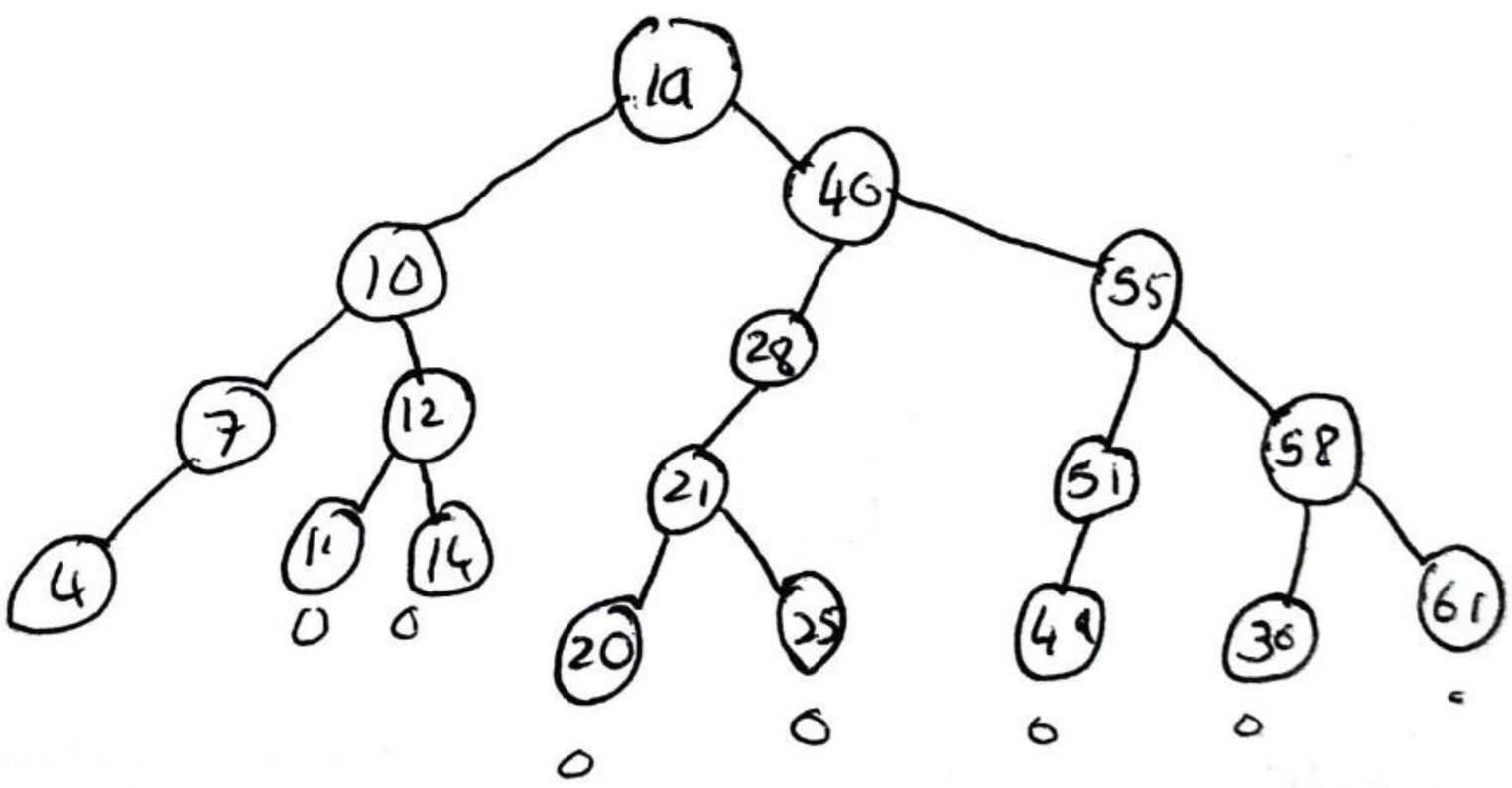
4. In the following AVL tree insert the nu
11, 9, 6, 56, 20, 25 and delete 18, 58, 19, 25



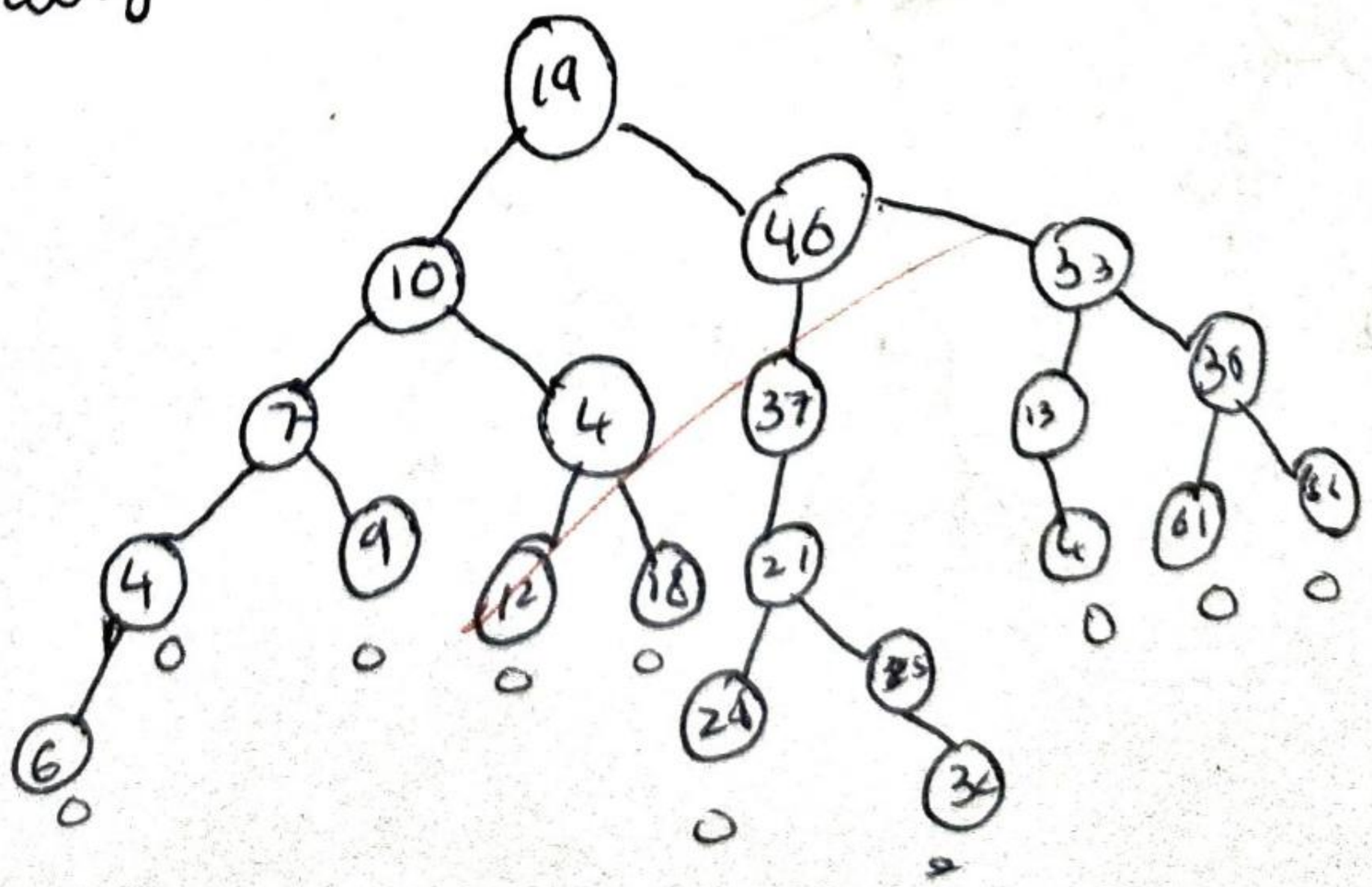
Deleting 18

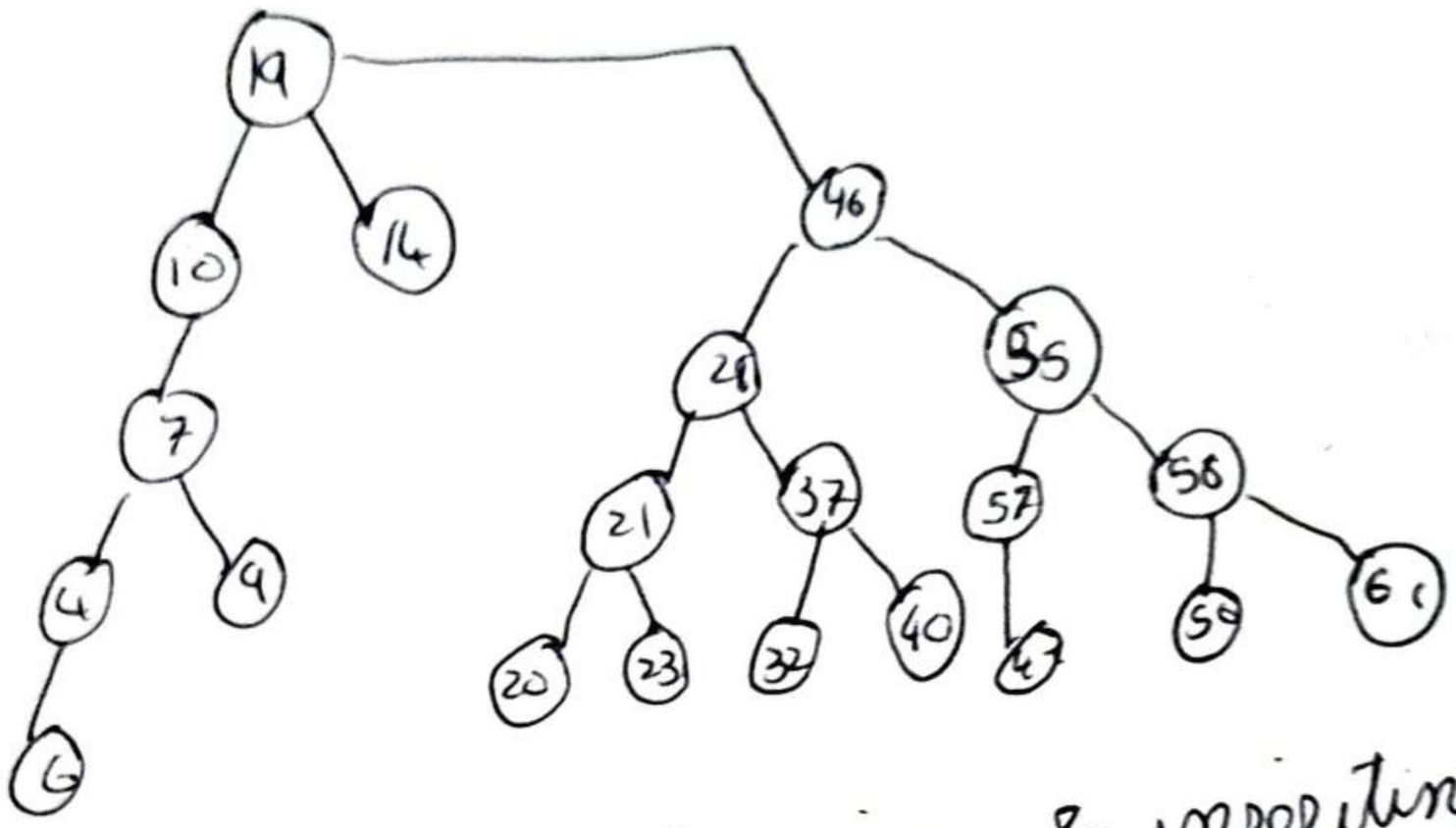


Not Balanced



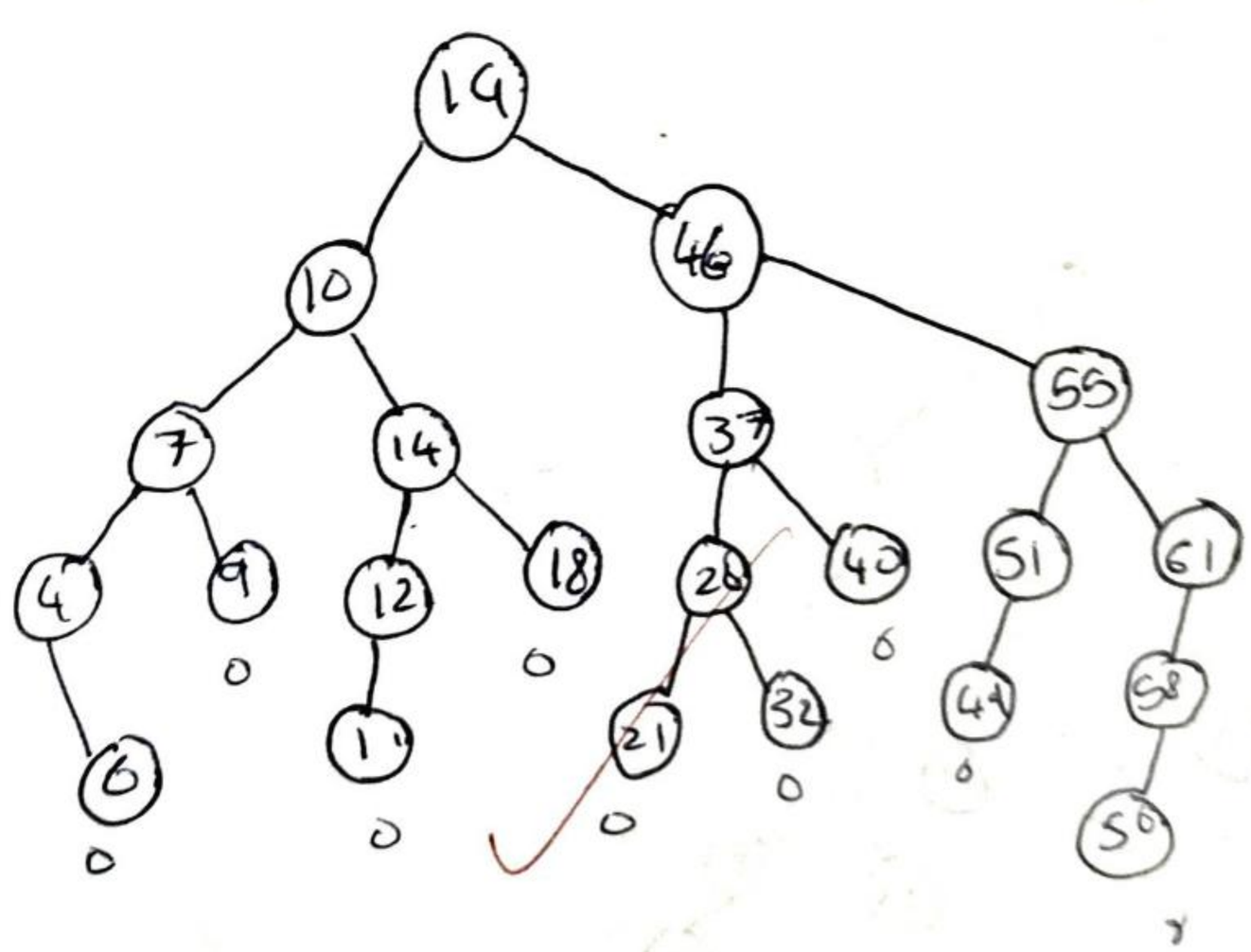
Balancing



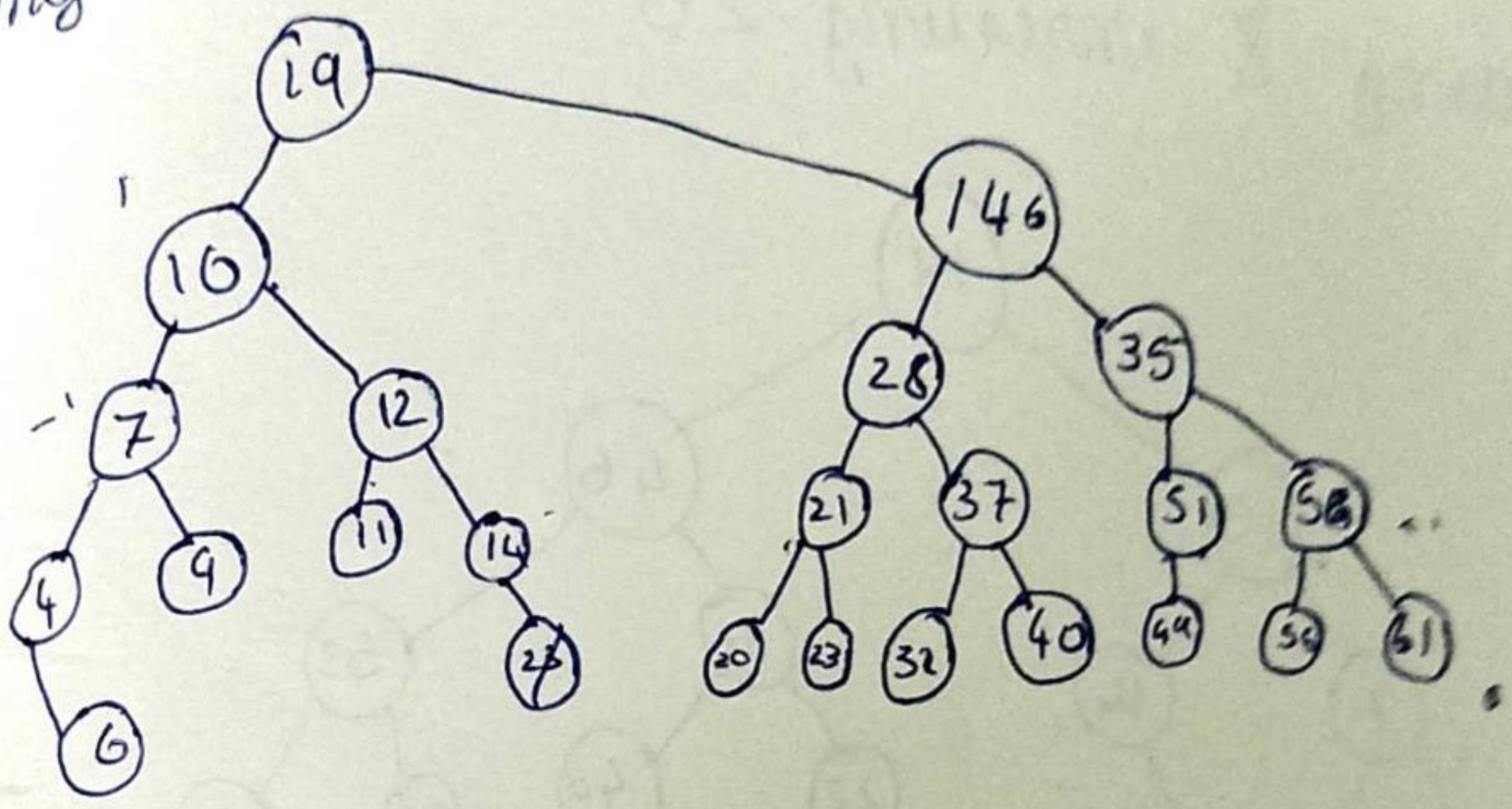


Balancing & inserting 23

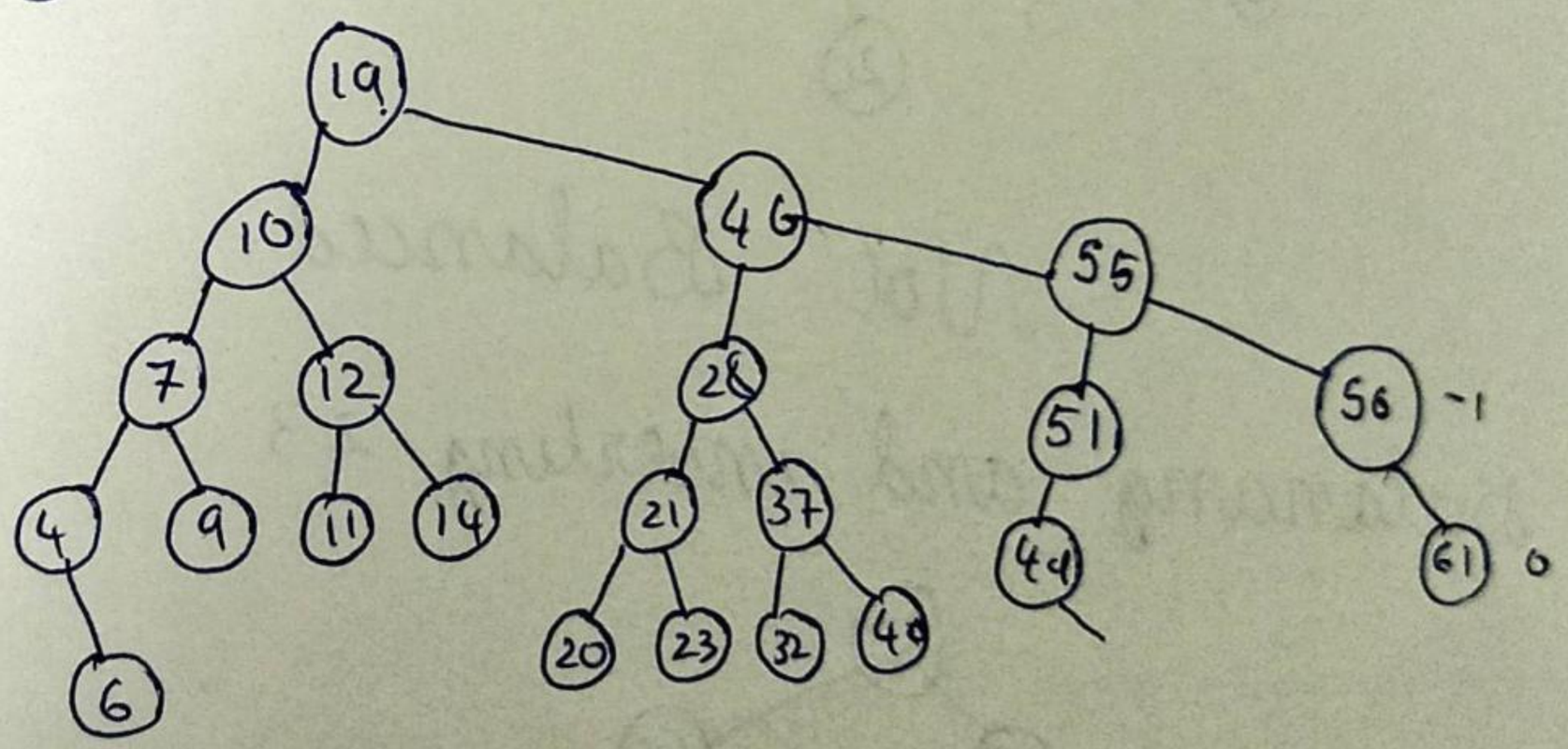
Balancing and inserting 6 & 56.



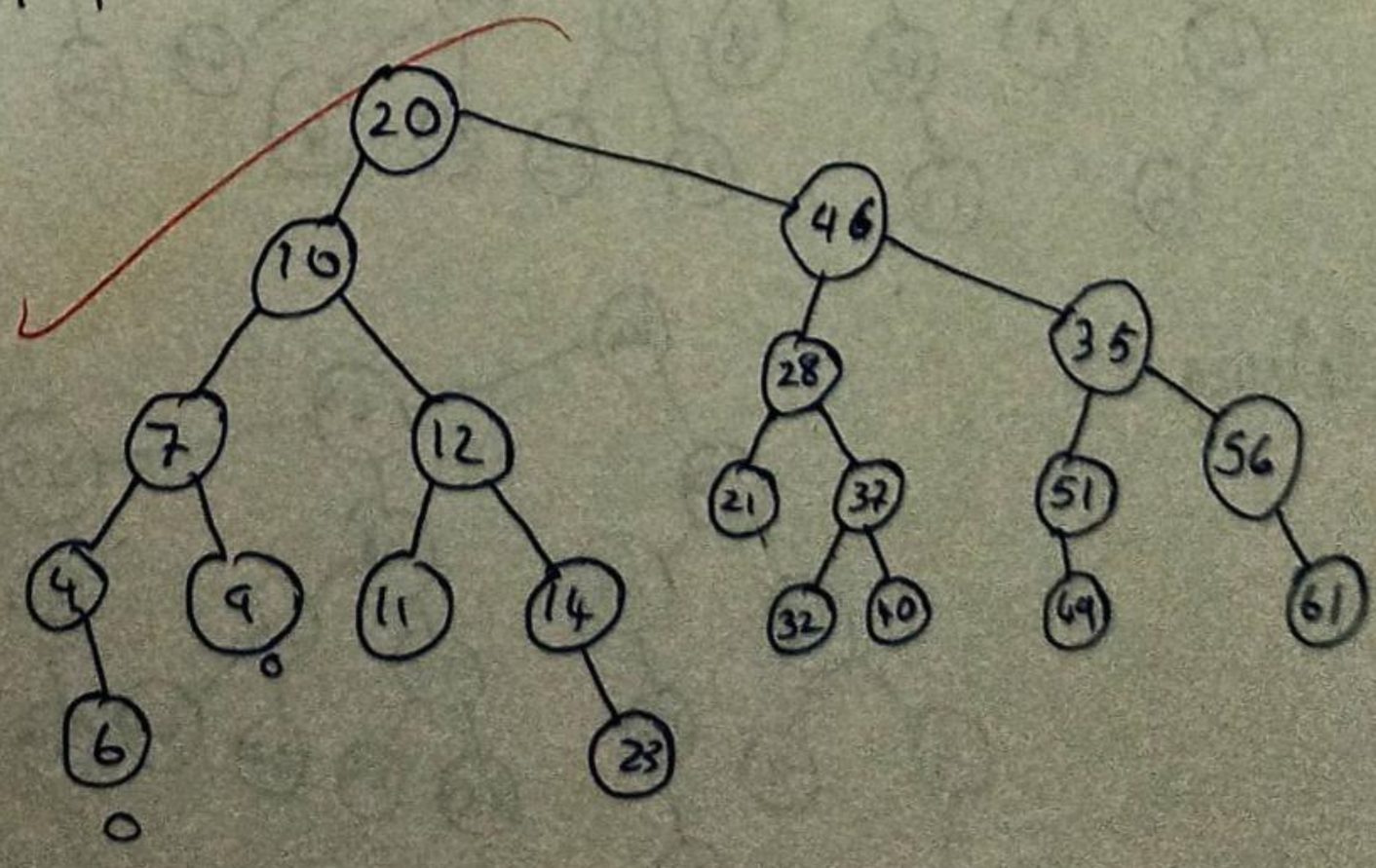
Balancing



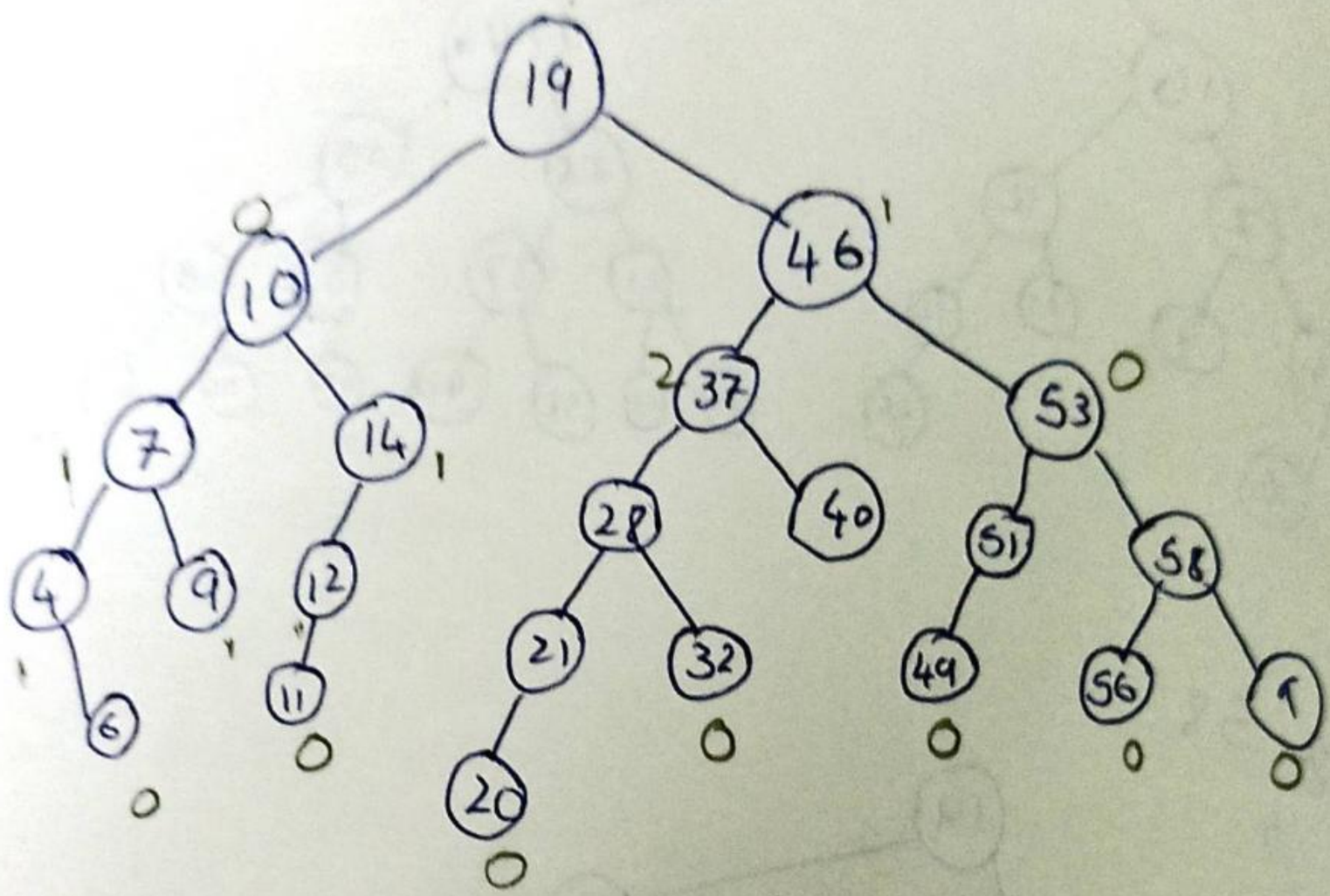
Deleting 58



Deleting 19

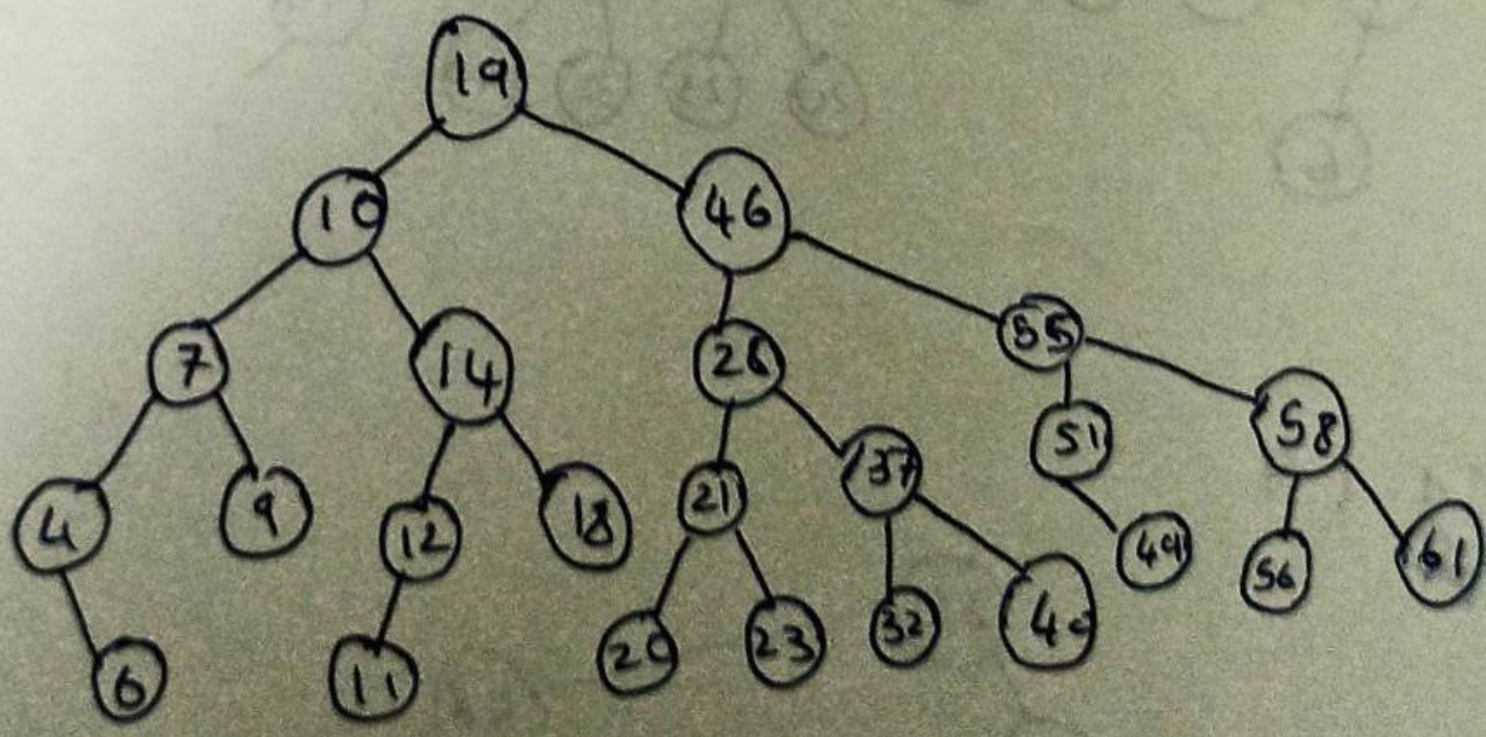


Balancing & inserting 20



Not Balanced

Balancing and inserting 23



Deleting 18