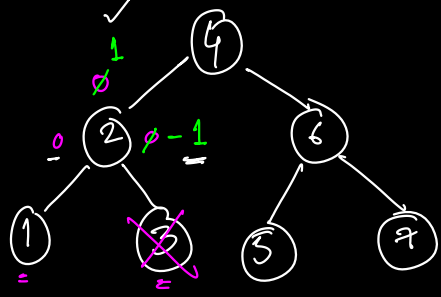
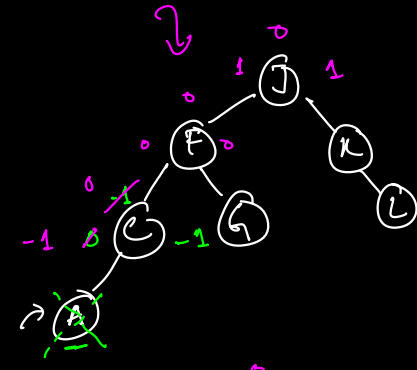
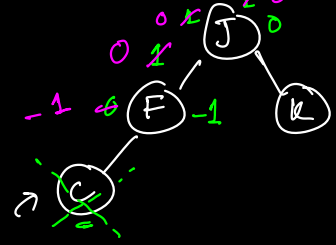


# AVL Deletion:-

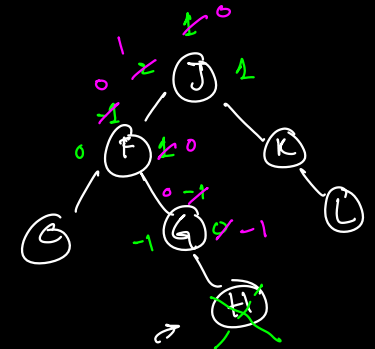
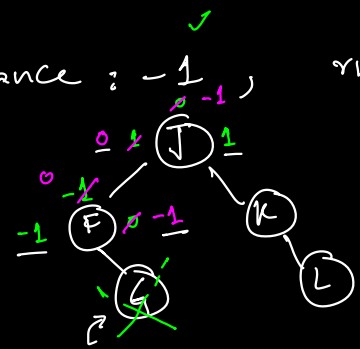
1b:



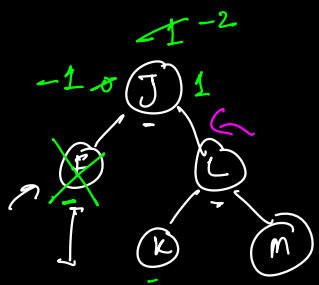
2a: Parent Balance: 1, left subtree.



2b: Parent Balance: -1, right subtree.

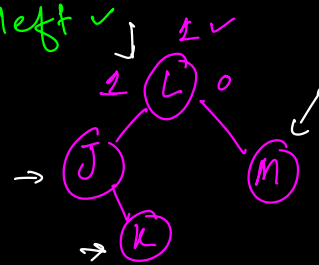


3a:



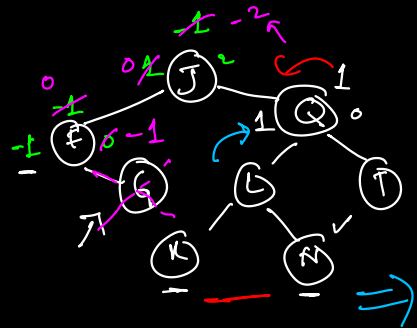
left rotate

PD = -1, right balanced.



Balanced

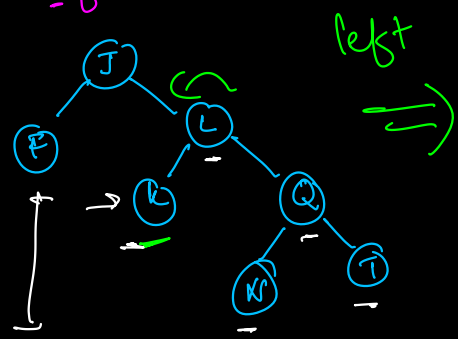
4a:



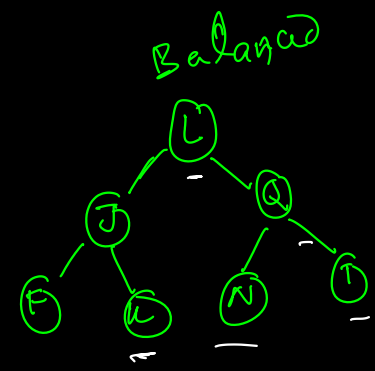
2b: Pb = -1 right

Right

PRB = -1, right imbalance

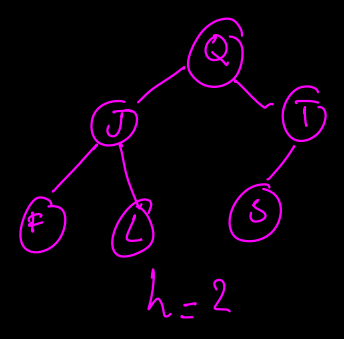
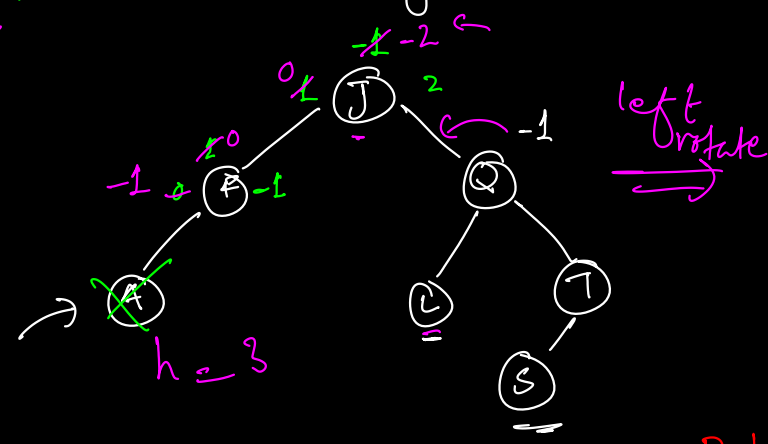


left

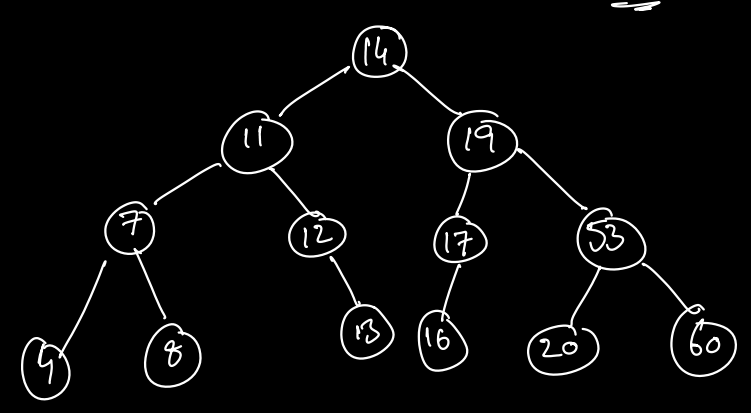


Balanced

3a PB: -1 ✓  
 left ✓  
 Right imbalance (outer) ✓

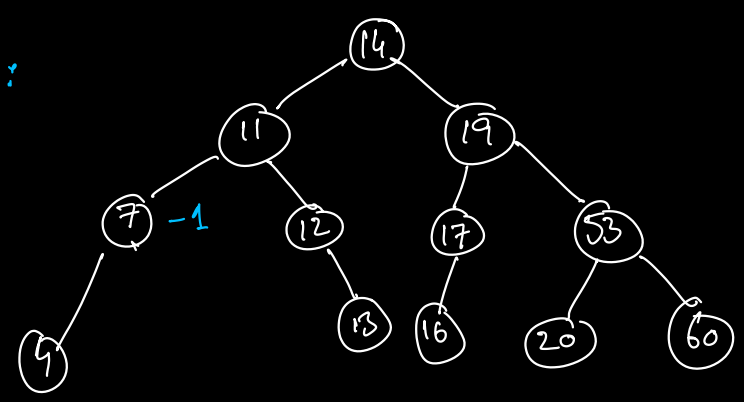


Example:

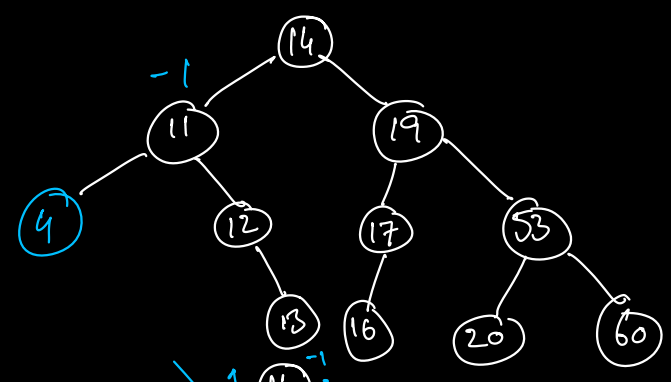


Delete: 8, 7, 11, 14, 17  
 ↓ ↓ ↓ ↓ ↓  
 1b 1a 2b 2a 3a

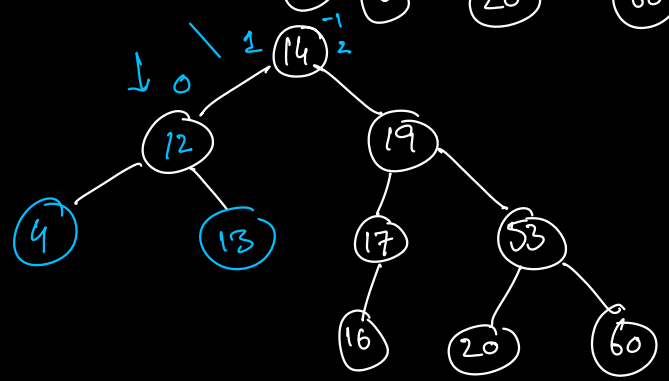
Delete 8:



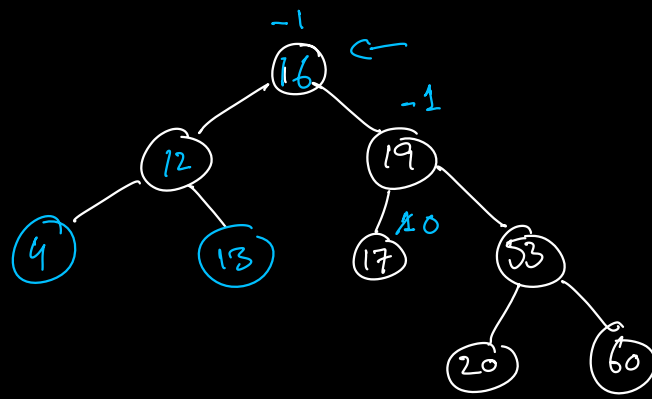
Delete 7:



Delete 11:



Delete 14 :



Delete 17 :

