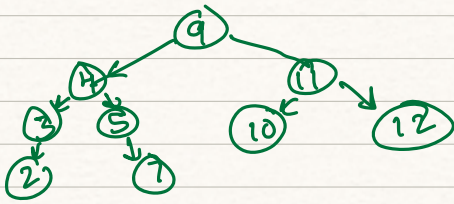
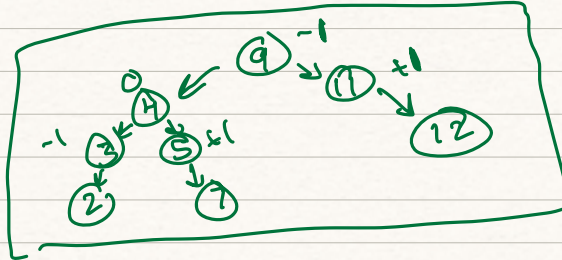


Start



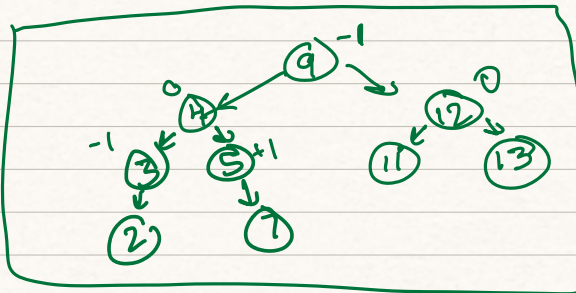
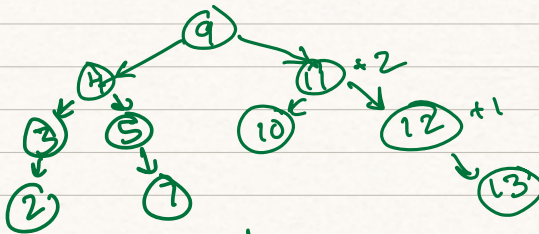
Remove 12

12 node gone, does not upset balance (leads to -2)



Insert 13

- goes in right of 12, does not ruin balance but shifts it slightly

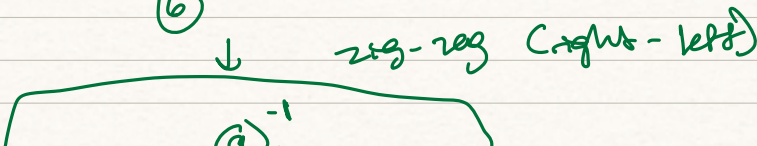
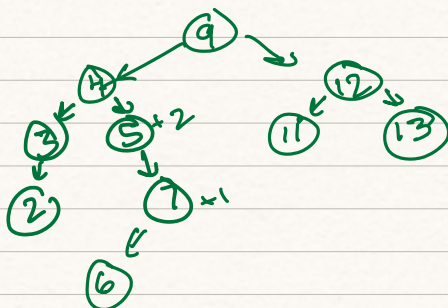


zig-zig (right-right) -> rotate left

good

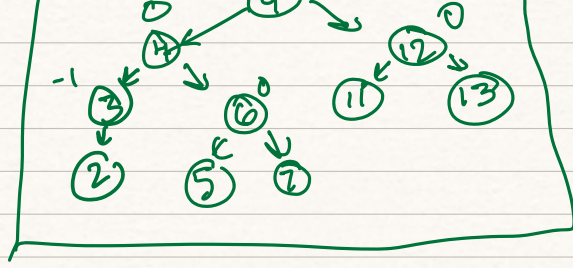
Insert 6

- goes left of 7 -> now some imbalances



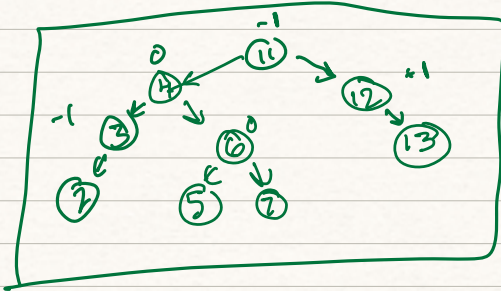
zig-zag (right-left) -> rotate right

no rotate 7 right, & then 5 left



Remove 9

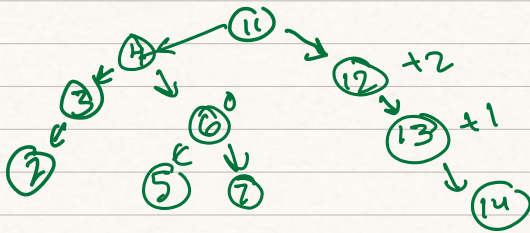
move up successor (left most of right child)



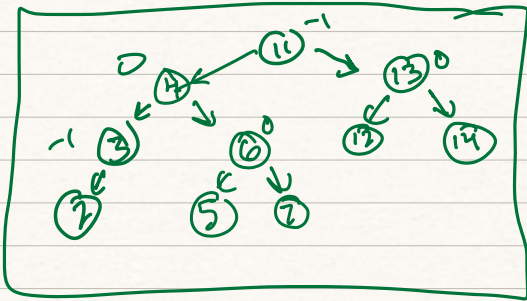
balanced ✓

Insert 14

-goes to right of 13



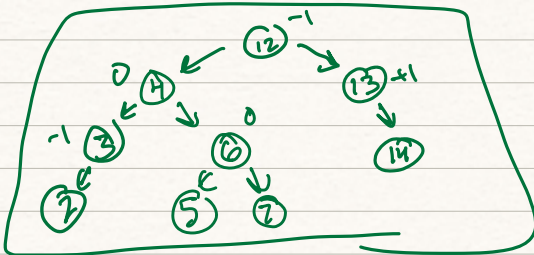
↓ zig-zig (right right) so rotate 12 left



good ✓

Remove 11

-swap 11 w/ successor (12) & then remove it



good ✓