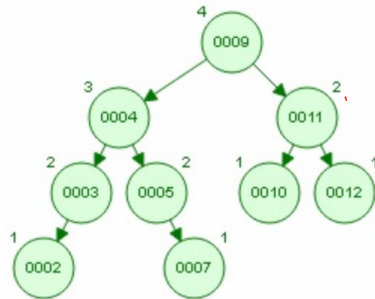


Problem 1 - AVL Operations (10%)

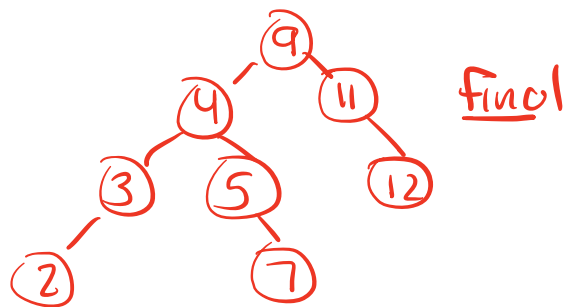
Consider the following initial configuration of an AVL Tree:



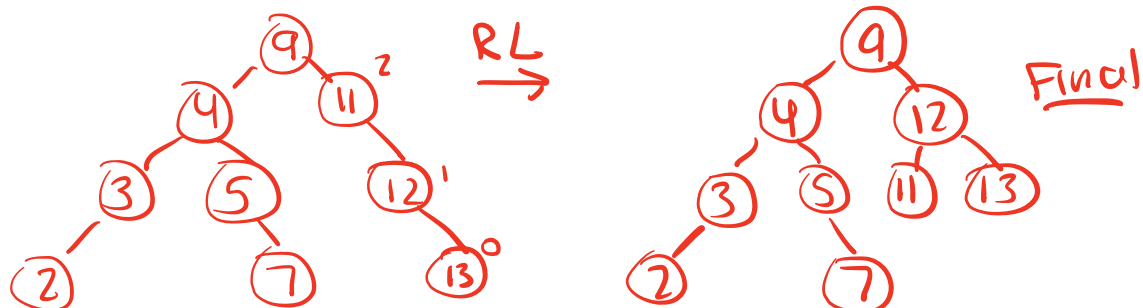
Draw the tree representation of the AVL tree after each of the following operations, using the method presented in class (when deleting, always promote a value from the right subtree...your successor). Your operations are done in **sequence**, so your tree should have 9 values in it when you're done. Make sure to clearly indicate each of your final answers.

- Remove 10
- Insert 13
- Insert 6
- Remove 9
- Insert 14
- Remove 11

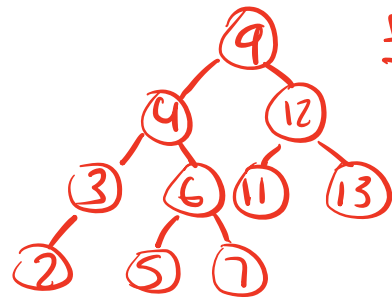
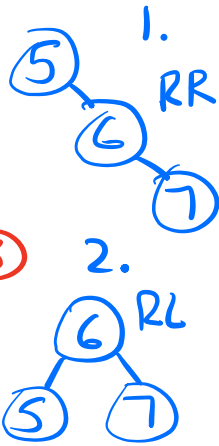
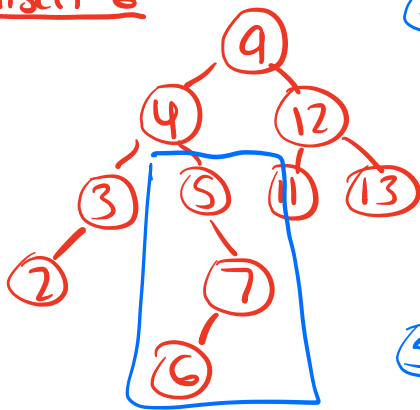
Remove 10



Insert 13

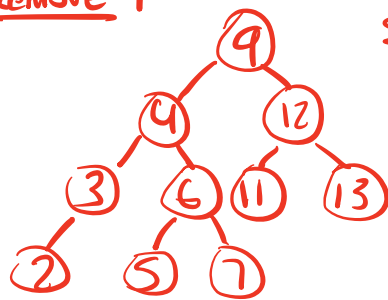


Insert 6

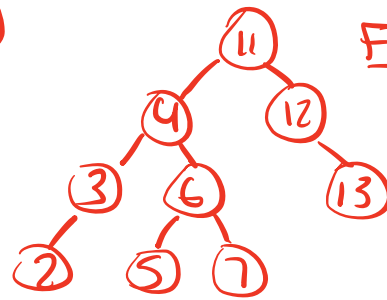


Final

Remove 9

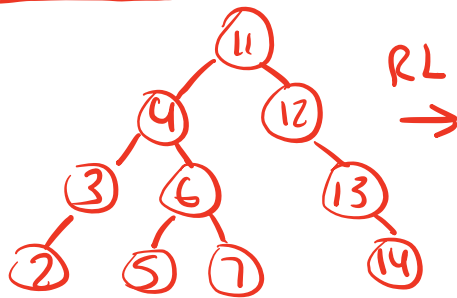


Swap(9, 11)

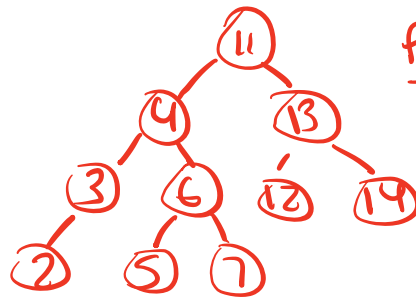


Final

Insert 14

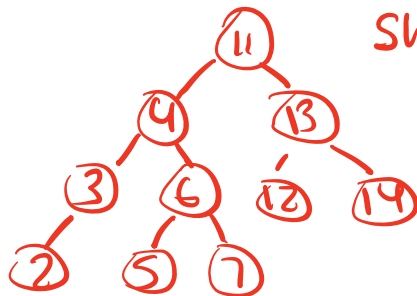


RL →

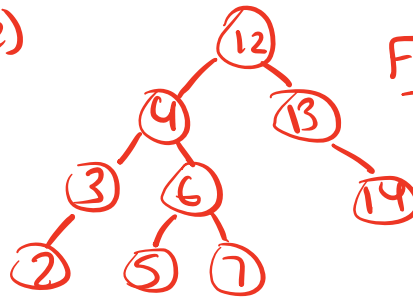


Final

Remove 11



Swap(11, 12)



Final