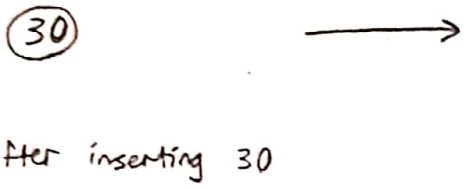
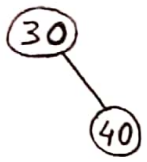
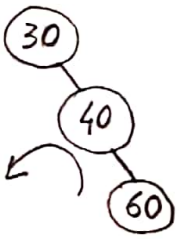
a) Insert 30, 40, 60, 90, 65, 70, 50, 95, 75, 80, 110 and delete 65, 95, 75 from an initially empty AVL tree.



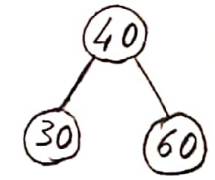
After inserting 30



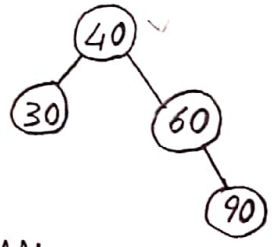
After inserting 40



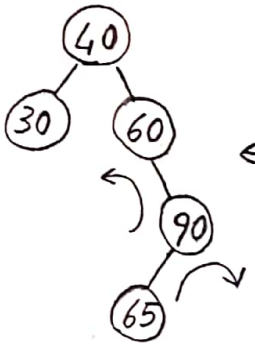
single left rotation (40, 30)



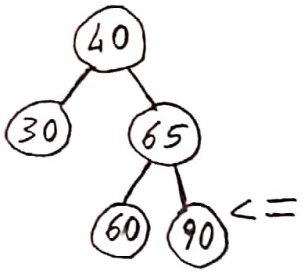
After inserting 60



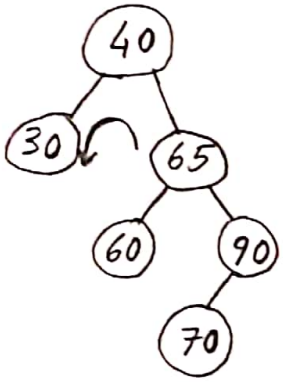
After inserting 90



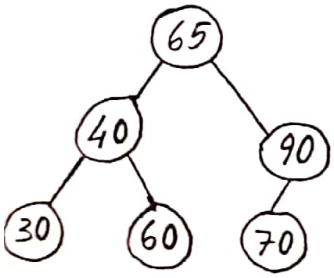
right-left rotation (65, 90, 60)



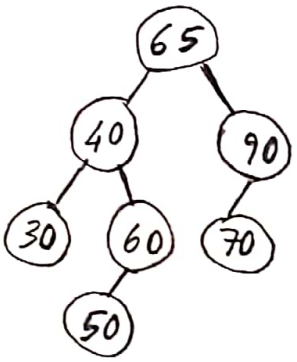
After inserting 65



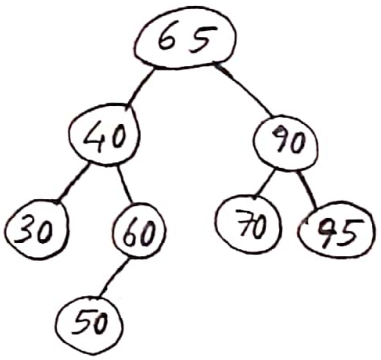
single left rotation (65, 40)



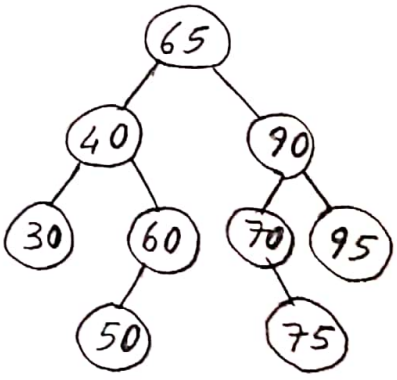
After inserting 70



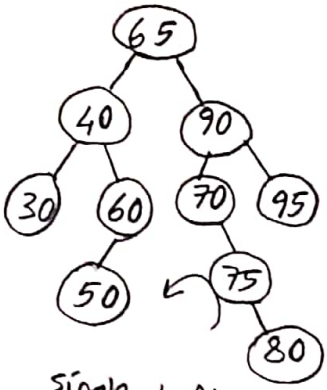
After inserting 50



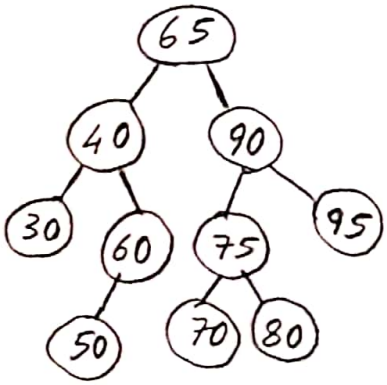
After inserting 95



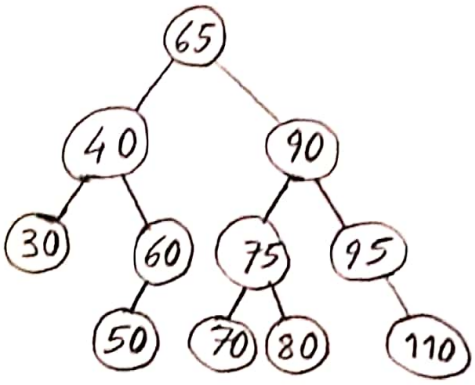
After inserting 75



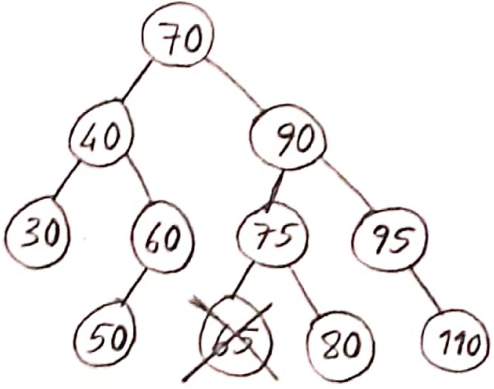
single left rotation (75, 70)



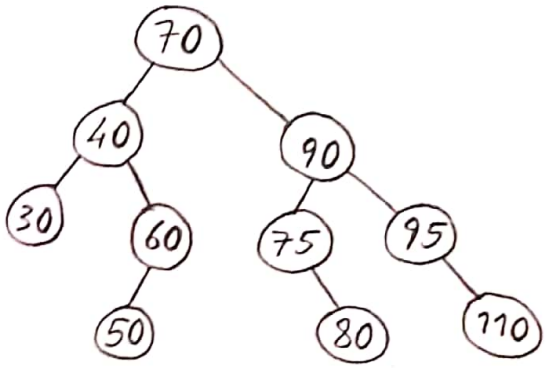
After inserting 80



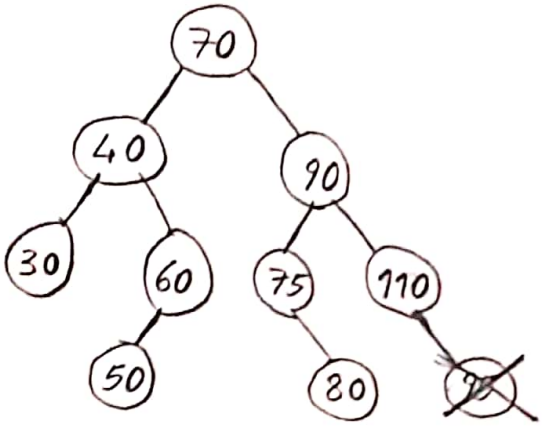
After inserting 110



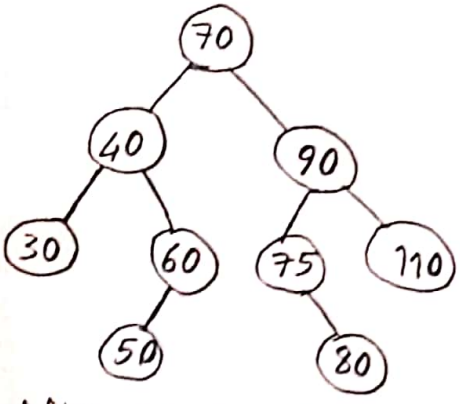
No rotation



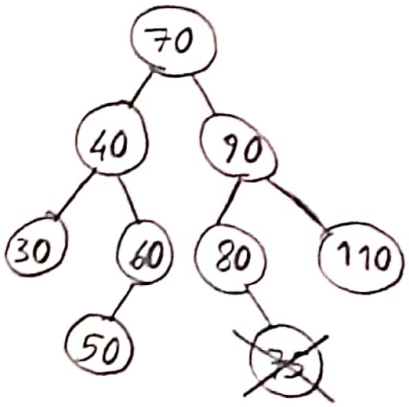
After deleting 65 (inorder successor = 70)



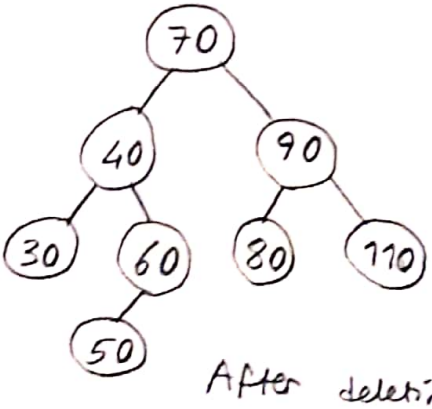
No rotation



After deleting 95



No rotation



After deleting 75