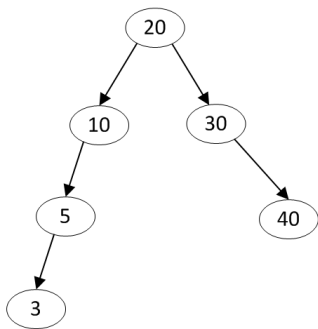


AVL WS

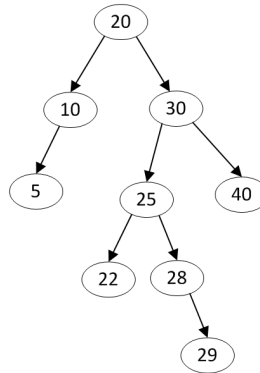
Calculate height and balance of each node. Calculate balance as $height(leftChild) - height(rightChild)$.

Then balance it with the correct rotation/double rotation – make sure to balance at the LOWEST out of balance location.

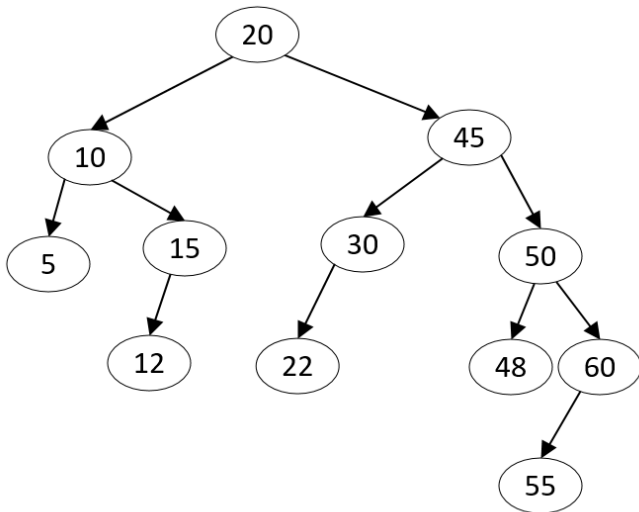
Just Inserted 3



Just Inserted 29



Delete 5 and rebalance this tree: *(Hint - the first correction should trigger a second correction.)*



Work out the final tree for this insertion sequence in an AVL tree:

10, 20, 30, 50, 40, 60

Use activity **32.4.2: AVL Trees Insertion Rotations** to check your work. First clear the tree, then add the nodes one at a time.

https://author.runestone.academy/ns/books/published/welcomeprogramming/balanced-trees_avl.html?mode=browsing#balanced-trees_avl-11