Idea on how to fix height Left Rotation

1. Increase *X*'s height by 1 and its left node's height by 1 if it exist.
2. Decrease *Y*'s height by 1 and its right node's height by 1 if it exist.
3. Decrease *Y*'s children node heights by 1 if it exist.
4. **After rotation**: Change *X*'s height h_X
   a) If left and right node exist and $h_{left} > h_{right}$, then $h_X = h_{left}$ else $h_X = h_{right}$
   b) If left node exist, $h_X = h_{left}$
   c) If right node exist, $h_X = h_{right}$
5. **After rotation**: Change *Y*'s right node height $h_{Y.RIGHT}$
   a) If left and right node exist and $h_{left} > h_{right}$, then $h_{Y.RIGHT} = h_{left}$ else h_{right}
   b) If left node exist, $h_{Y.RIGHT} = h_{left}$
   c) If right node exist, $h_{Y.RIGHT} = h_{right}$
6. **After rotation**: Change *Y*'s height h_Y
   a) If left and right node exist and $h_{left} > h_{right}$, then $h_Y = h_{left}$ else h_{right}
   b) If left node exist, $h_Y = h_{left}$
   c) If right node exist, $h_Y = h_{right}$

Same Idea for Right Rotation