

balance factor $height_{left} - height_{right}$
if $BF(node) > 0$ { # left heavy

if $BF(node.left) < 0$ { # right heavy

clockwise $left.rotate(node.left)$

$left.rotate(node)$

}

if $BF(node) < 0$ { # right heavy

if $BF(node.right) > 0$ { # left heavy

Counter-clockwise $right.rotate(node.right)$

$right.rotate(node)$

}