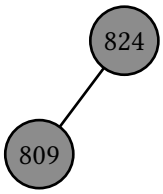
## red-black tree:

## Add 824:

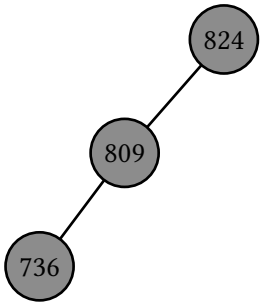
## Add 809:

- 809 < 824

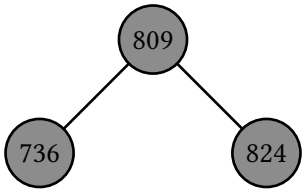



## Add 736:

- 736 < 809 < 824

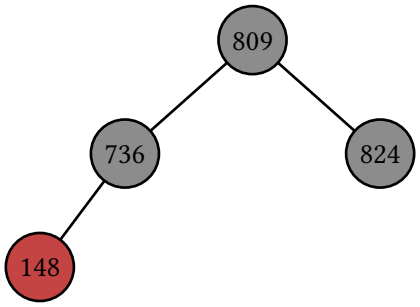



- rotate right



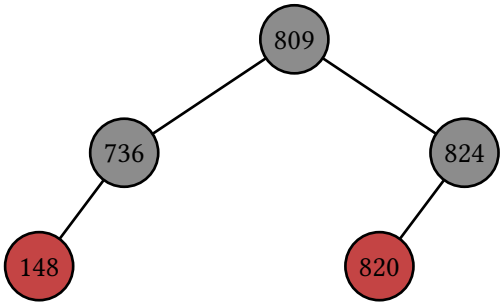
## Add 148:

- 148 < 736 < 809



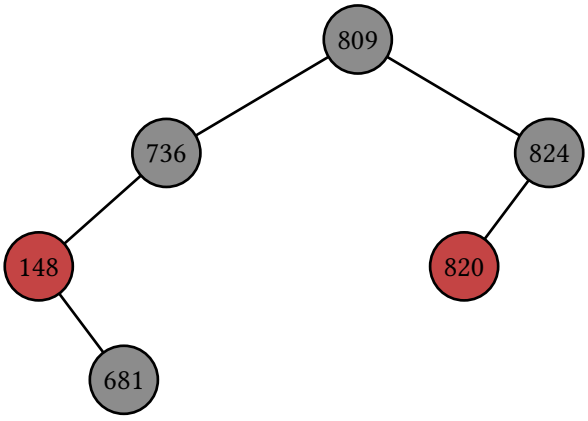

## Add 820:

- 809 < 820 < 824

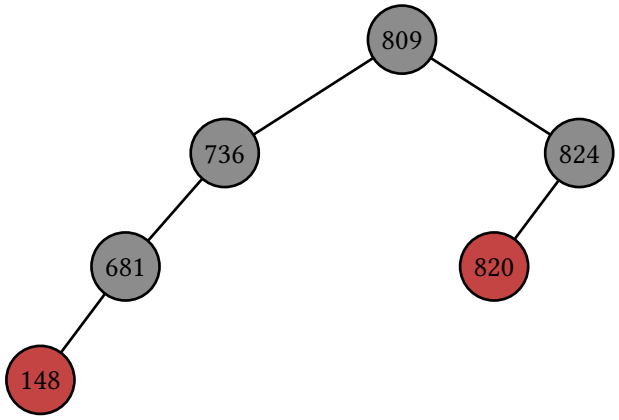



## Add 681:

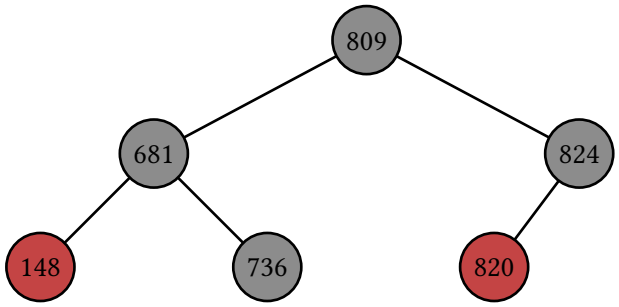
- 148 < 681 < 736 < 809



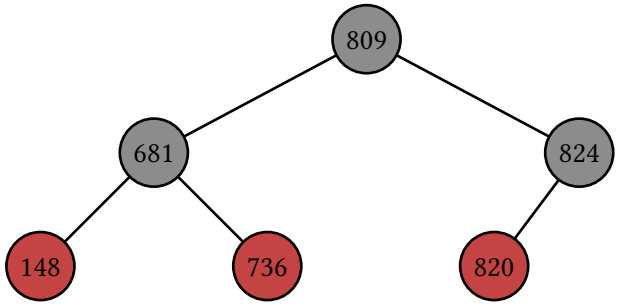
- rotate left



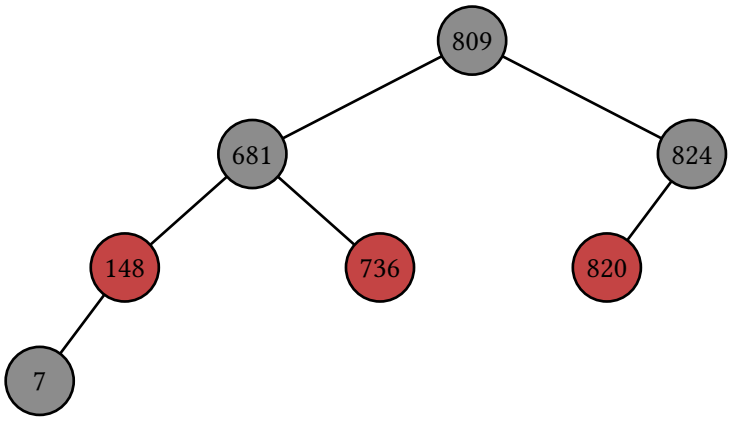

- rotate right



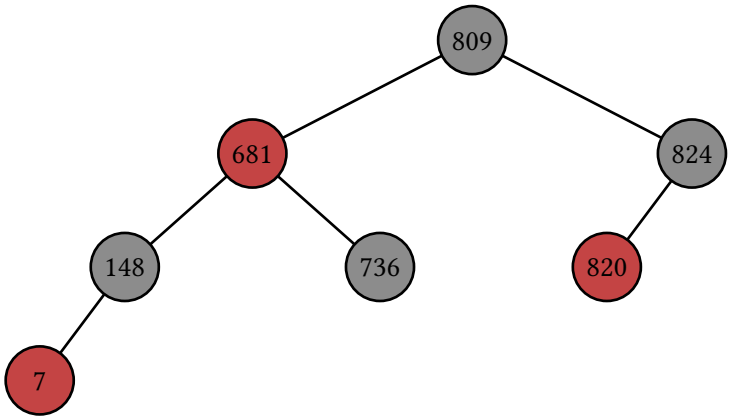

- recolor



## Add 7:

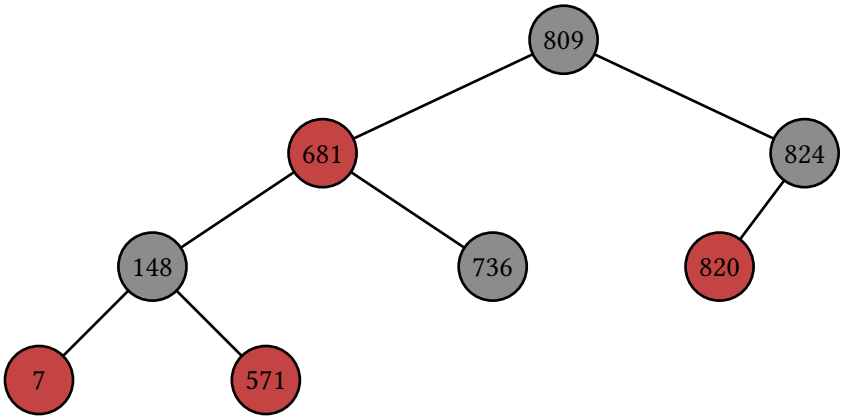



- recolor



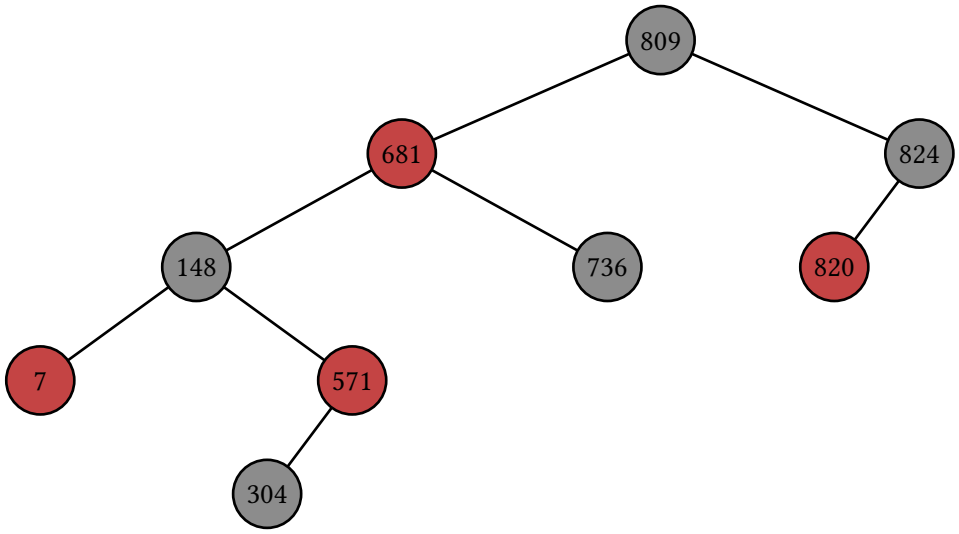

## Add 571:

- 148 < 571 < 681 < 809

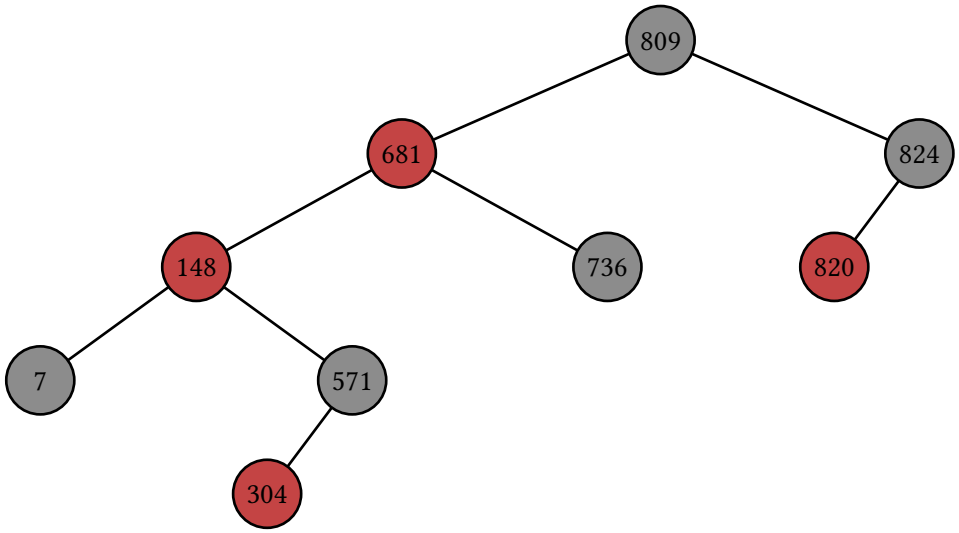


## Add 304:

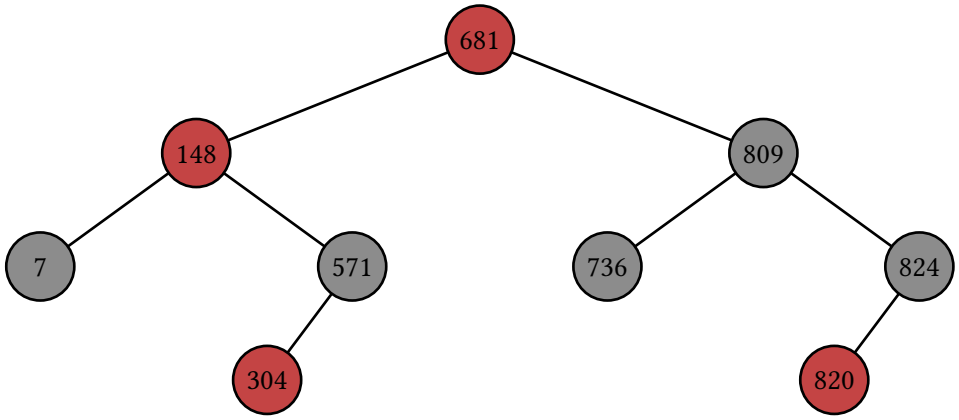
- 148 < 304 < 571 < 681 < 809



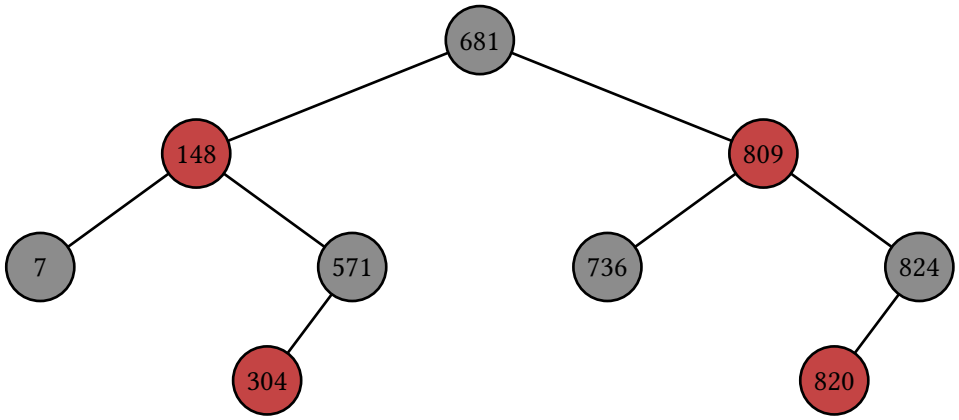

- recolor



- rebalance [148] > rotate right

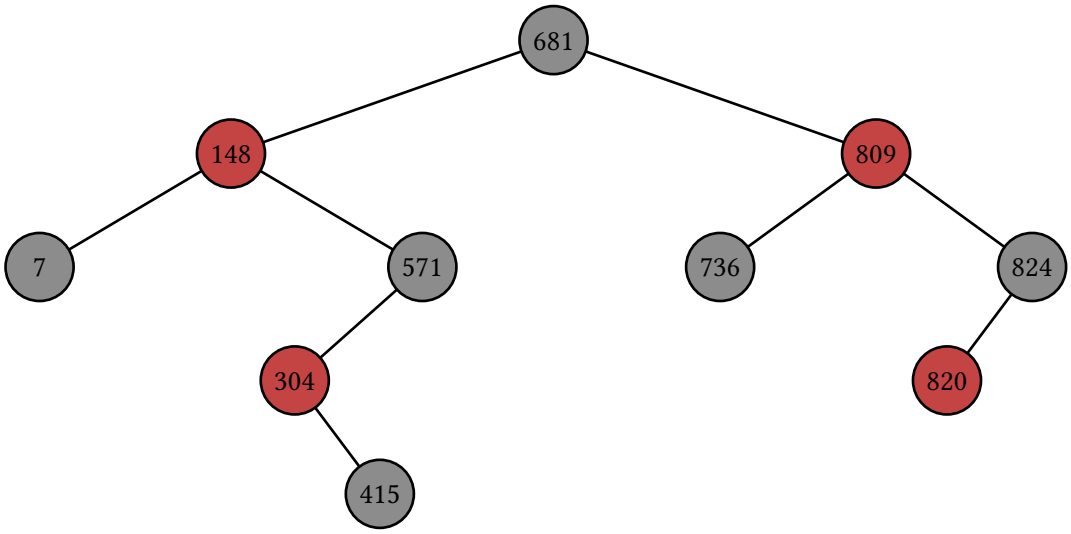



- rebalance [148] > recolor

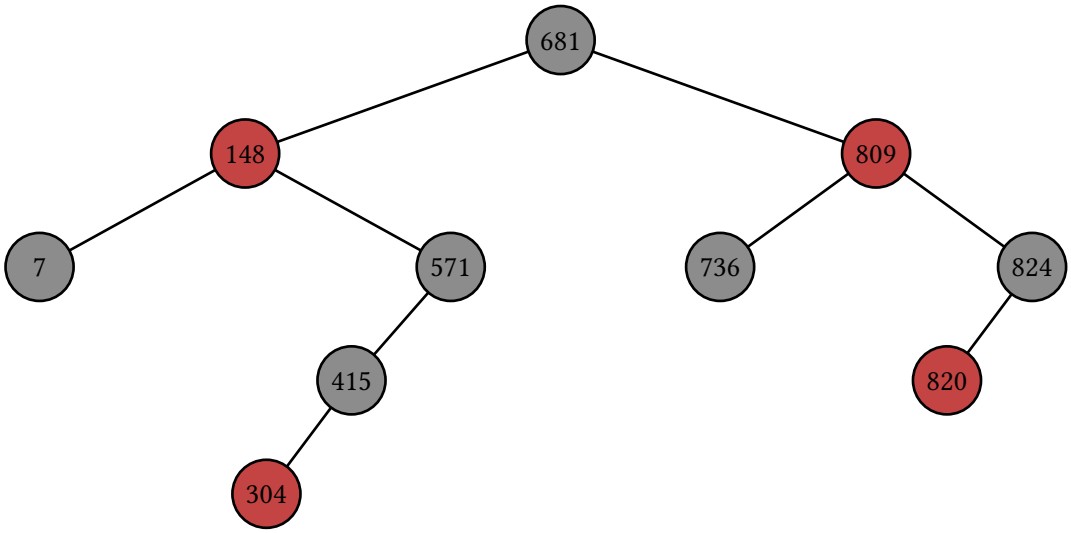


## Add 415:

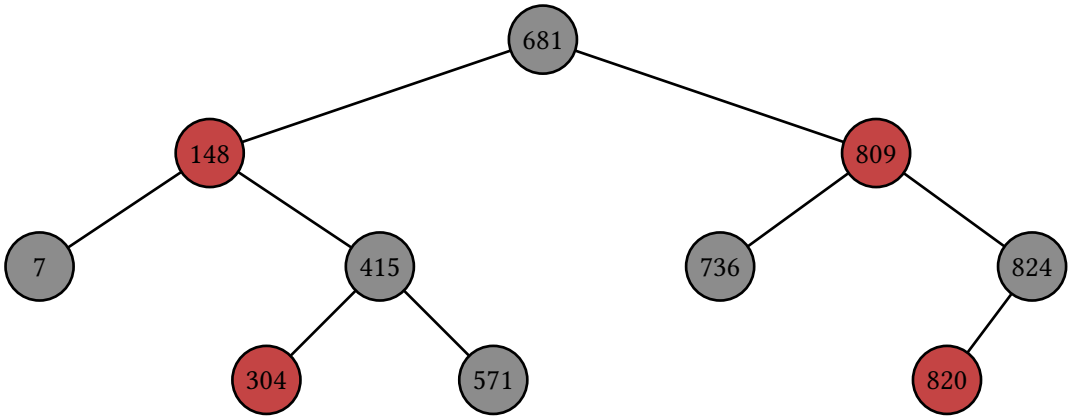
- 148 < 304 < 415 < 571 < 681

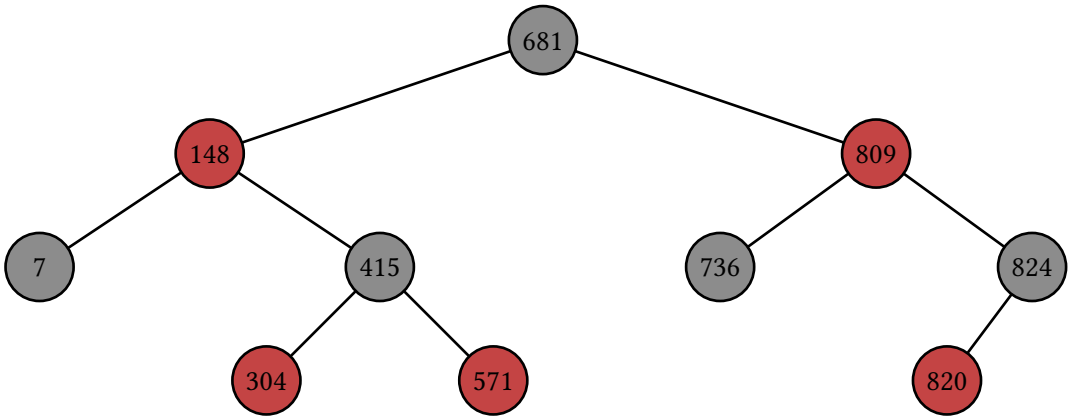



-rotate left



-rotate right




- recolor