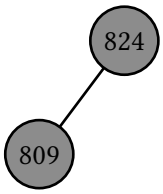
red-black tree:

Add 824:

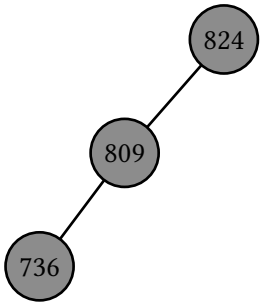
Add 809:

- 809 < 824

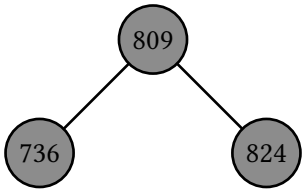


Add 736:

- 736 < 809 < 824

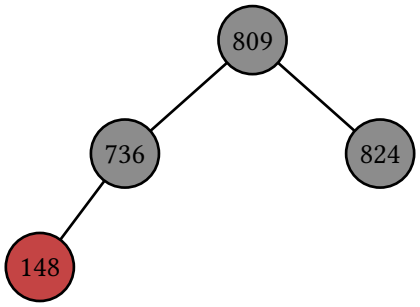


- rotate right



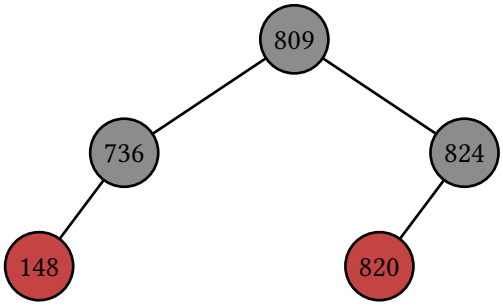
Add 148:

- 148 < 736 < 809



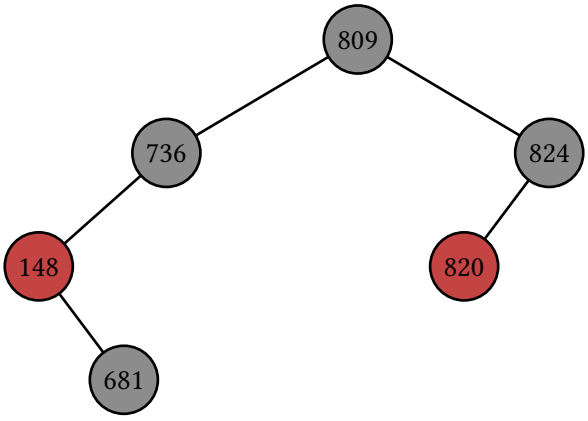
Add 820:

- 809 < 820 < 824

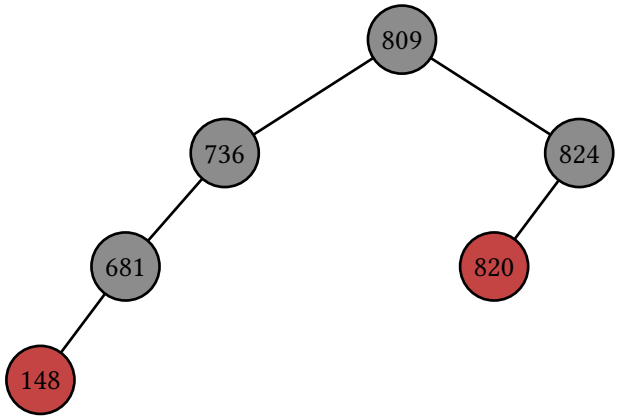


Add 681:

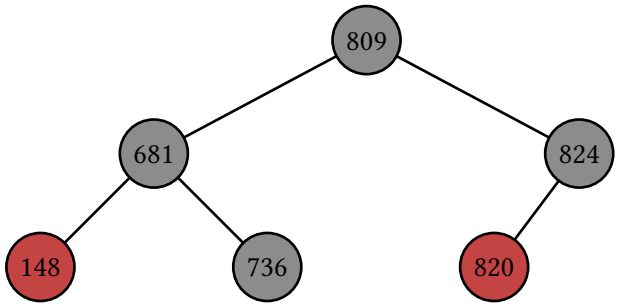
- 148 < 681 < 736 < 809



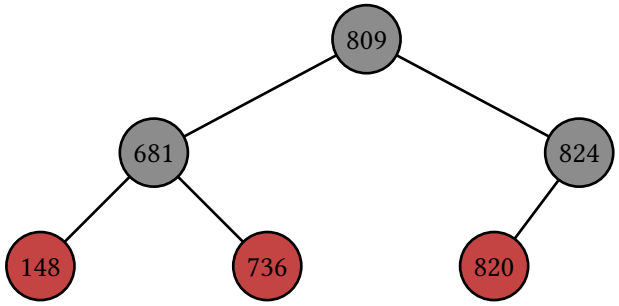
- rotate left



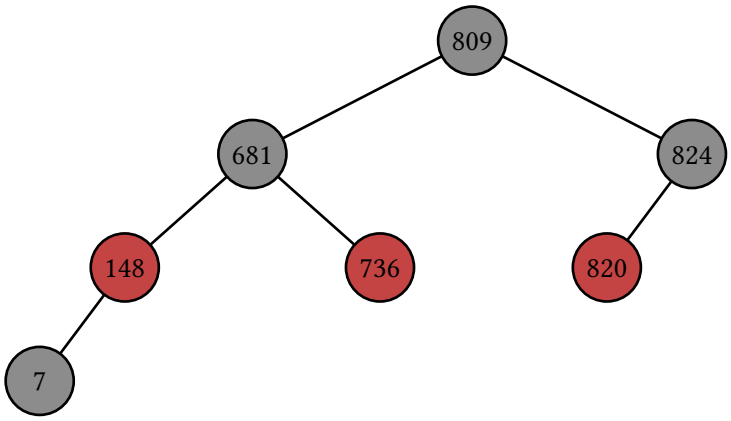
- rotate right



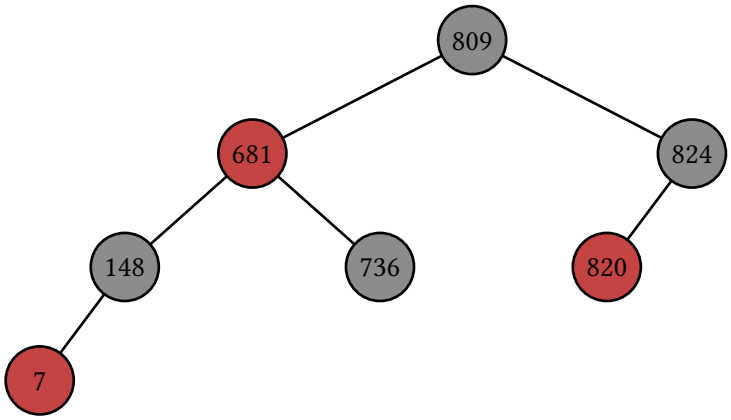
- recolor



Add 7:

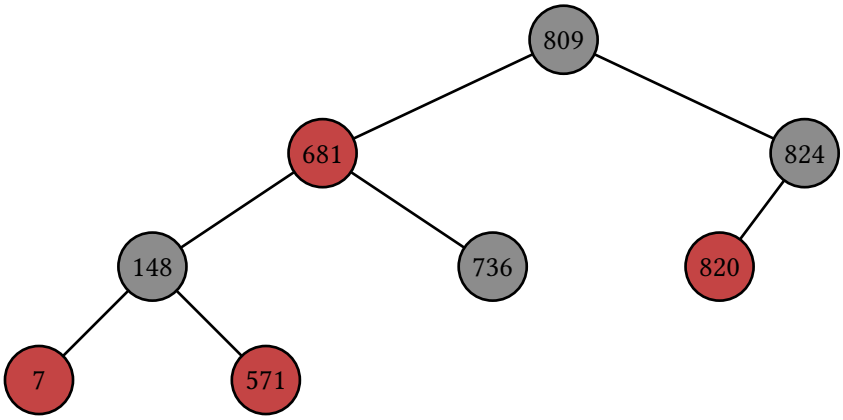


- recolor



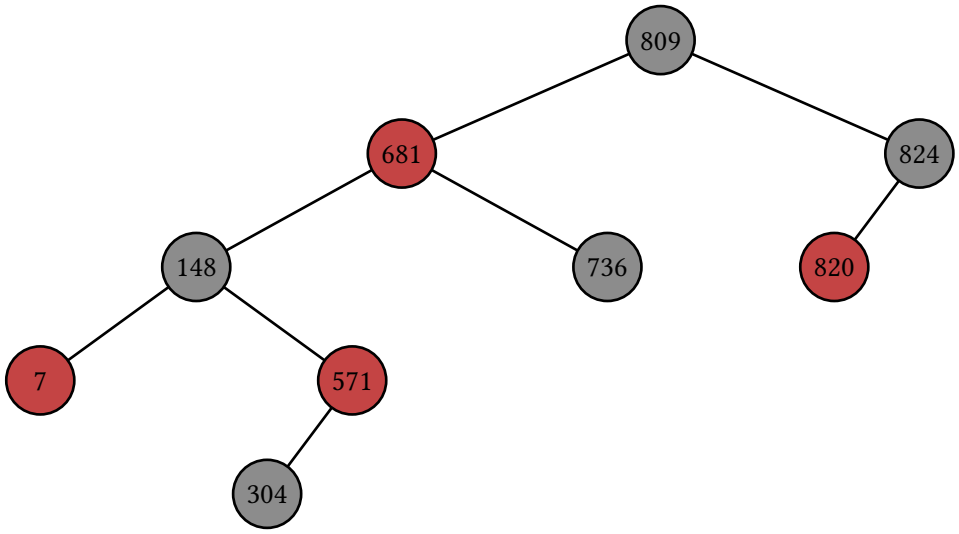
Add 571:

- 148 < 571 < 681 < 809

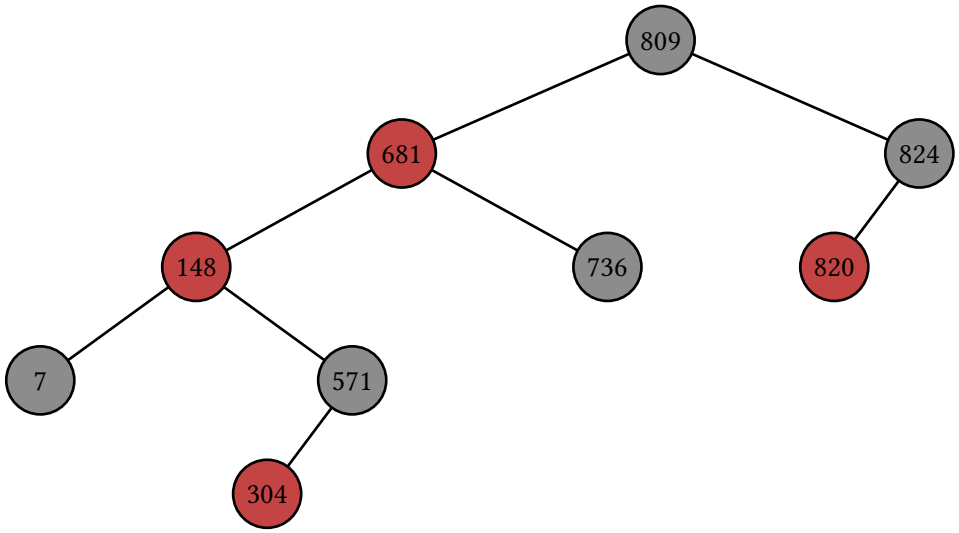


Add 304:

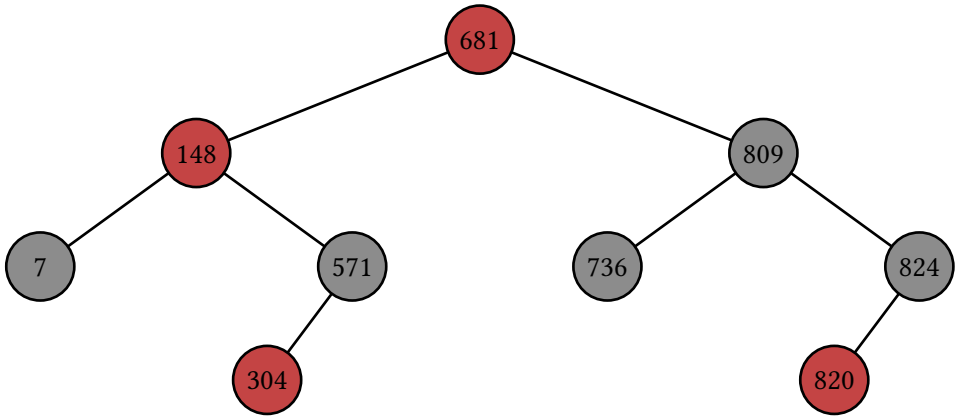
- 148 < 304 < 571 < 681 < 809



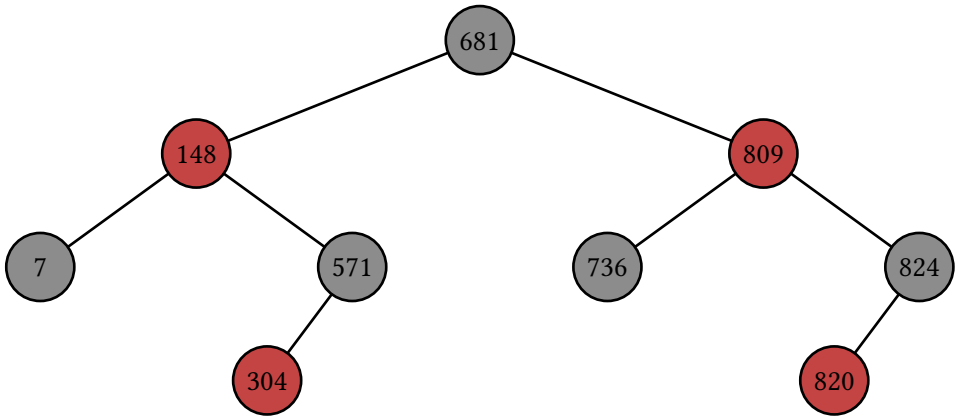
- recolor



- rebalance [148] > rotate right

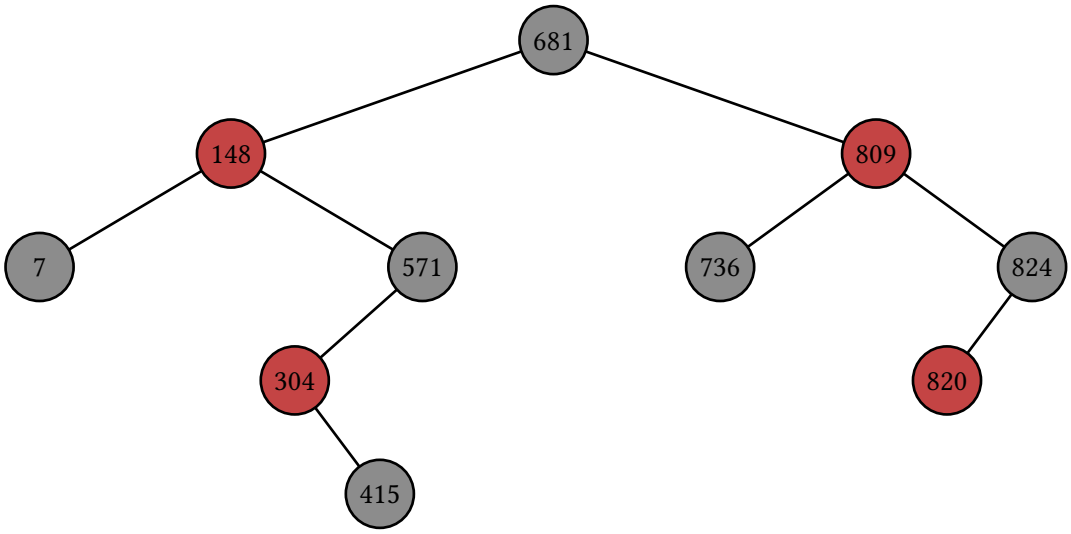


- rebalance [148] > recolor

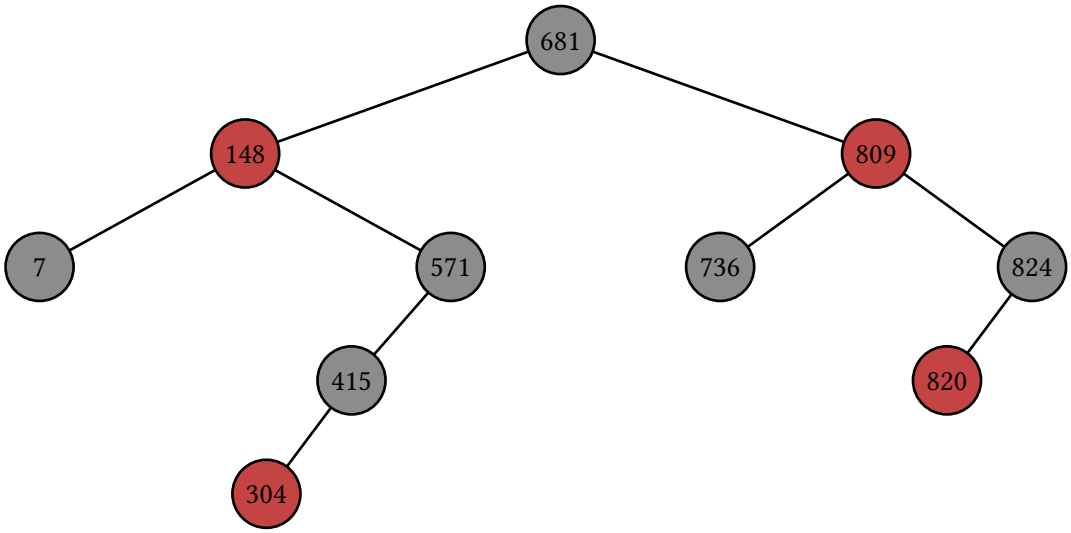


Add 415:

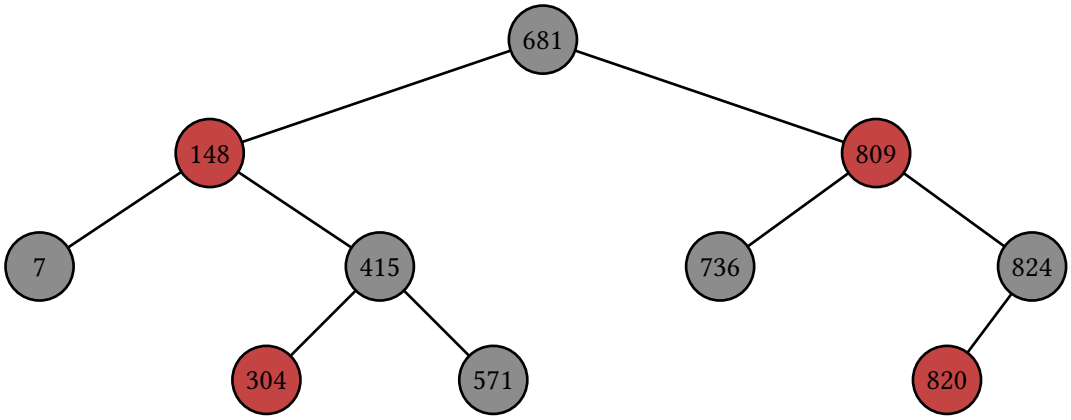
- 148 < 304 < 415 < 571 < 681



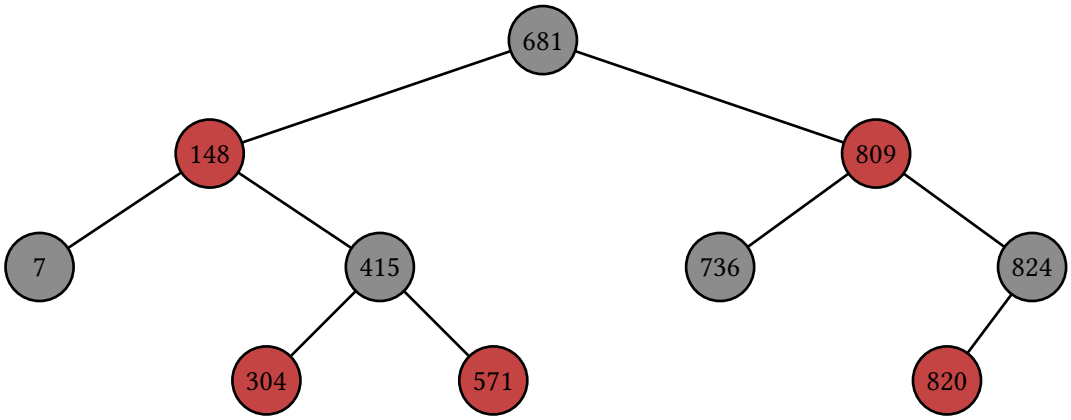
-rotate left



-rotate right

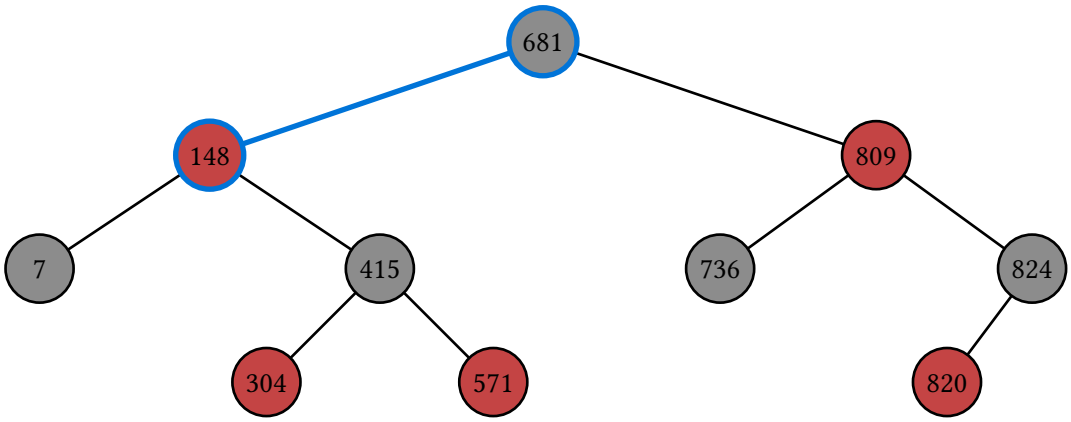


- recolor



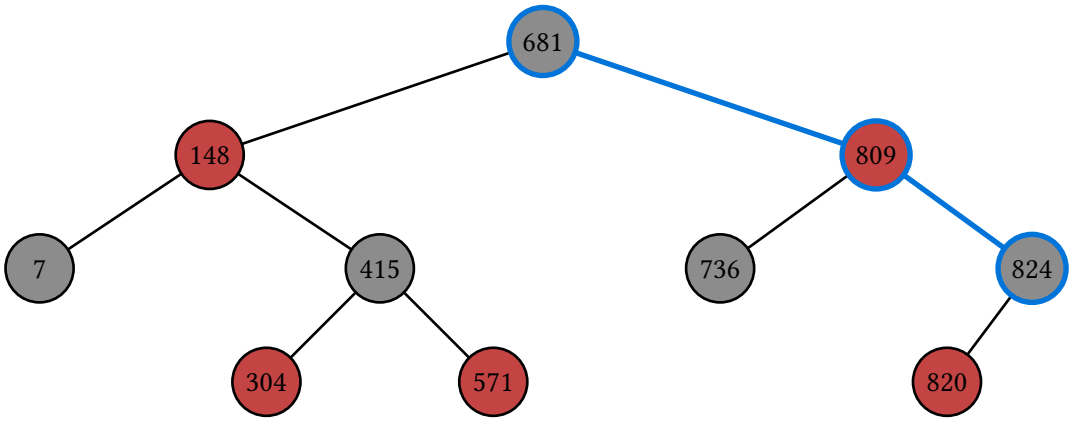
Find 148:

- 148 < 681



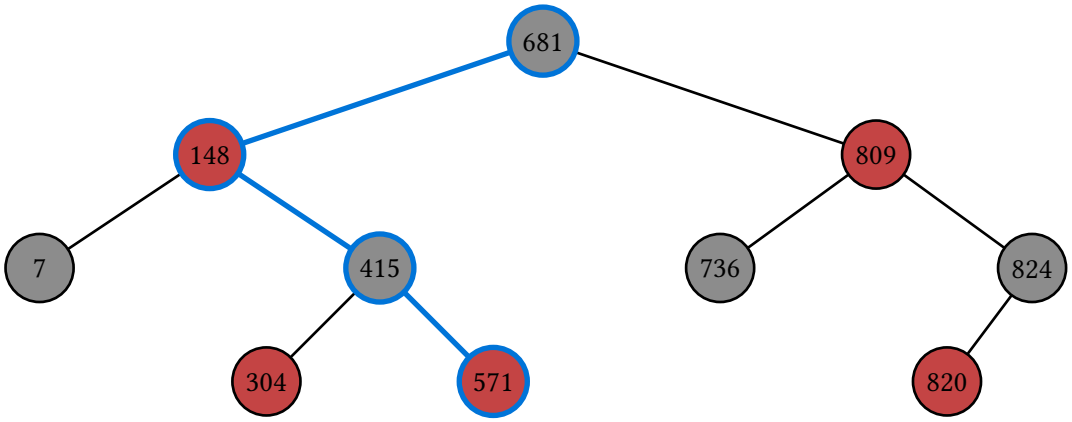
Get max:

- MAX is the most right item
- MAX = 824



Find 568:

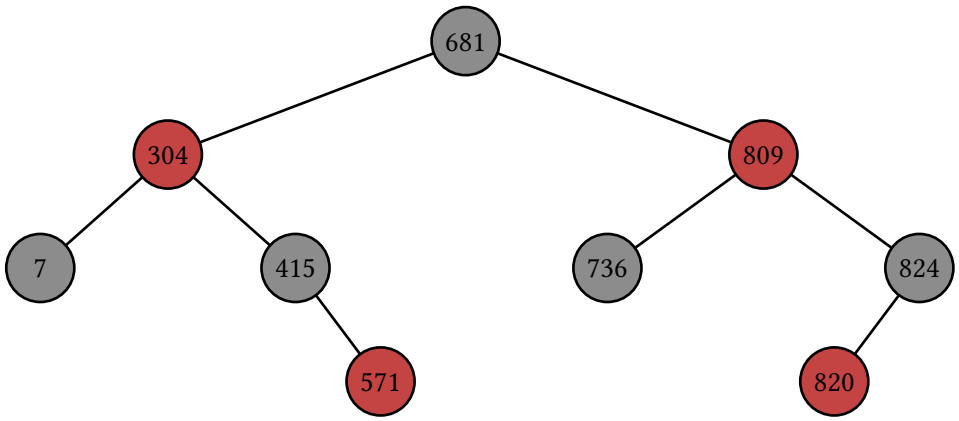
- 148 < 304 < 415 < 568 < 571 < 681



- key not found

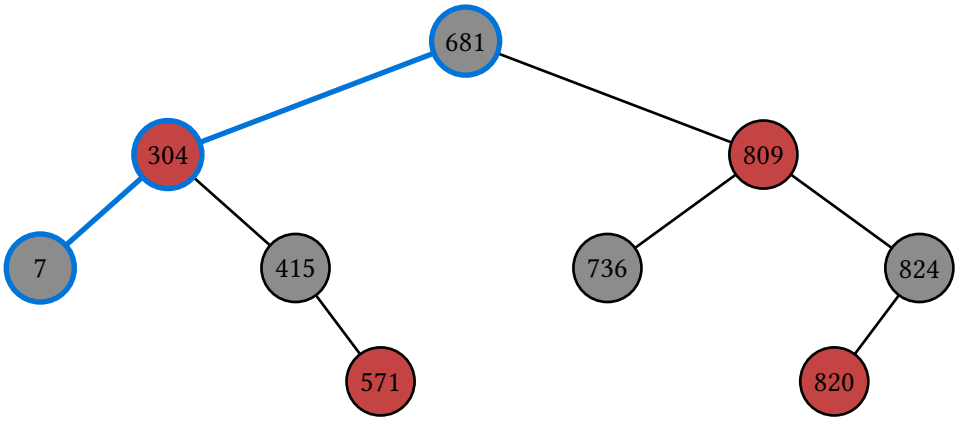
Delete 148:

Next key value is 304



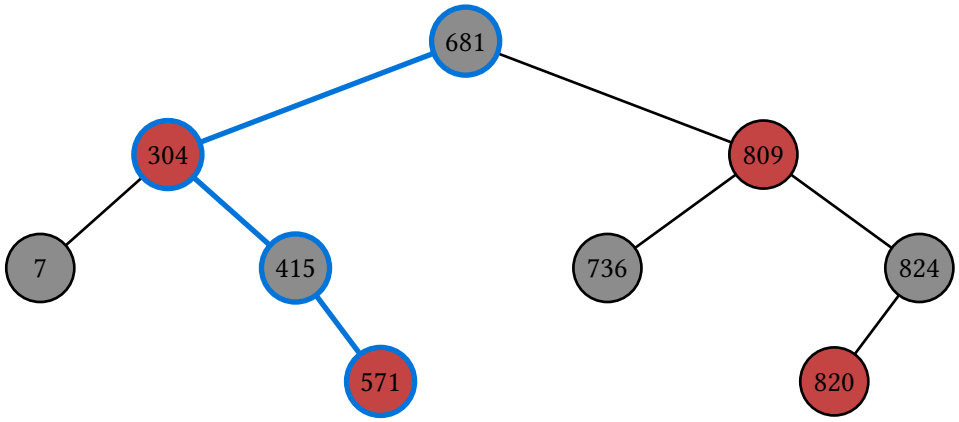
Get min:

- MIN is the most left item
- MIN = 7



Find 571:

- 304 < 415 < 571 < 681



Delete 571:

[571] is leaf