

Insert 3

3

Insert 21

3 21

Insert 9

3 9 21

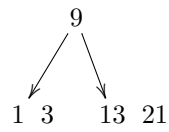
Insert 1

1 3 9 21

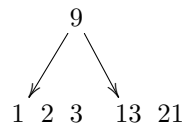
Insert 13

1 3 9 13 21

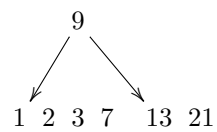
But that violate condition 5, so we promote 9.



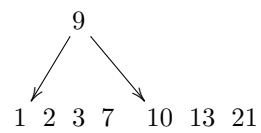
Insert 2



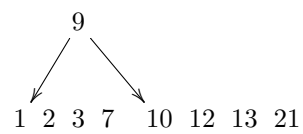
Insert 7



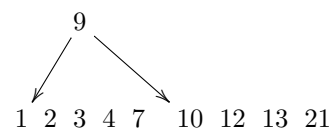
Insert 10



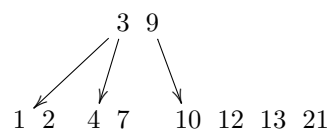
Insert 12



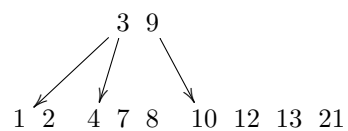
Insert 4



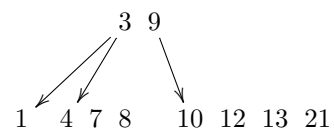
But that violate condition 5, so we promote 3:



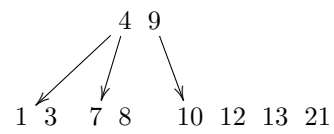
Insert 8



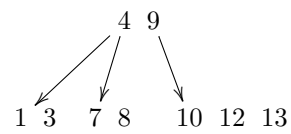
Delete 2



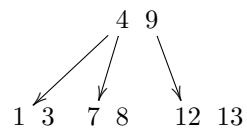
Too few siblings, so we rotate 3 and 4



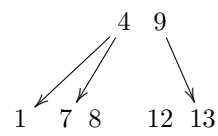
delete 21



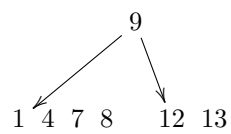
delete 10



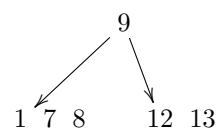
delete 3



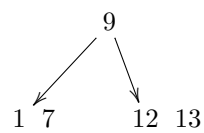
Too few siblings, so we combine 1, 4, 7, 8



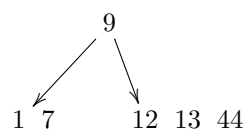
delete 4



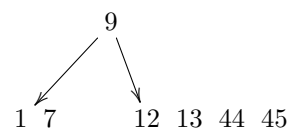
delete 8



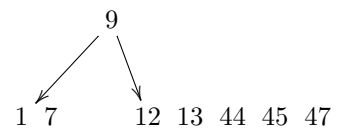
insert 44



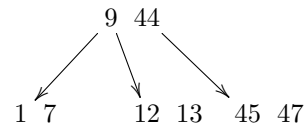
insert 45



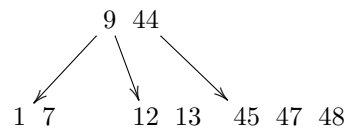
insert 47



Too many siblings, so we promote 44



insert 48



insert 49

