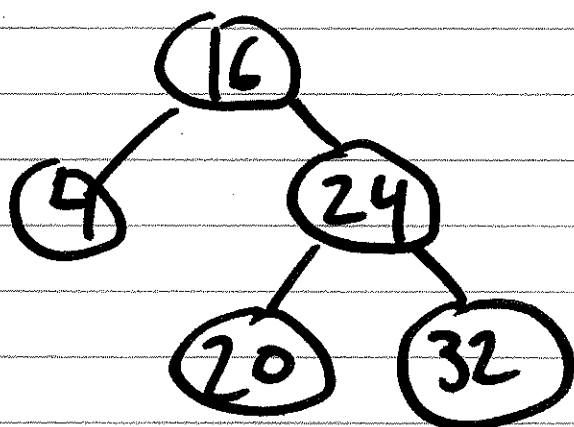


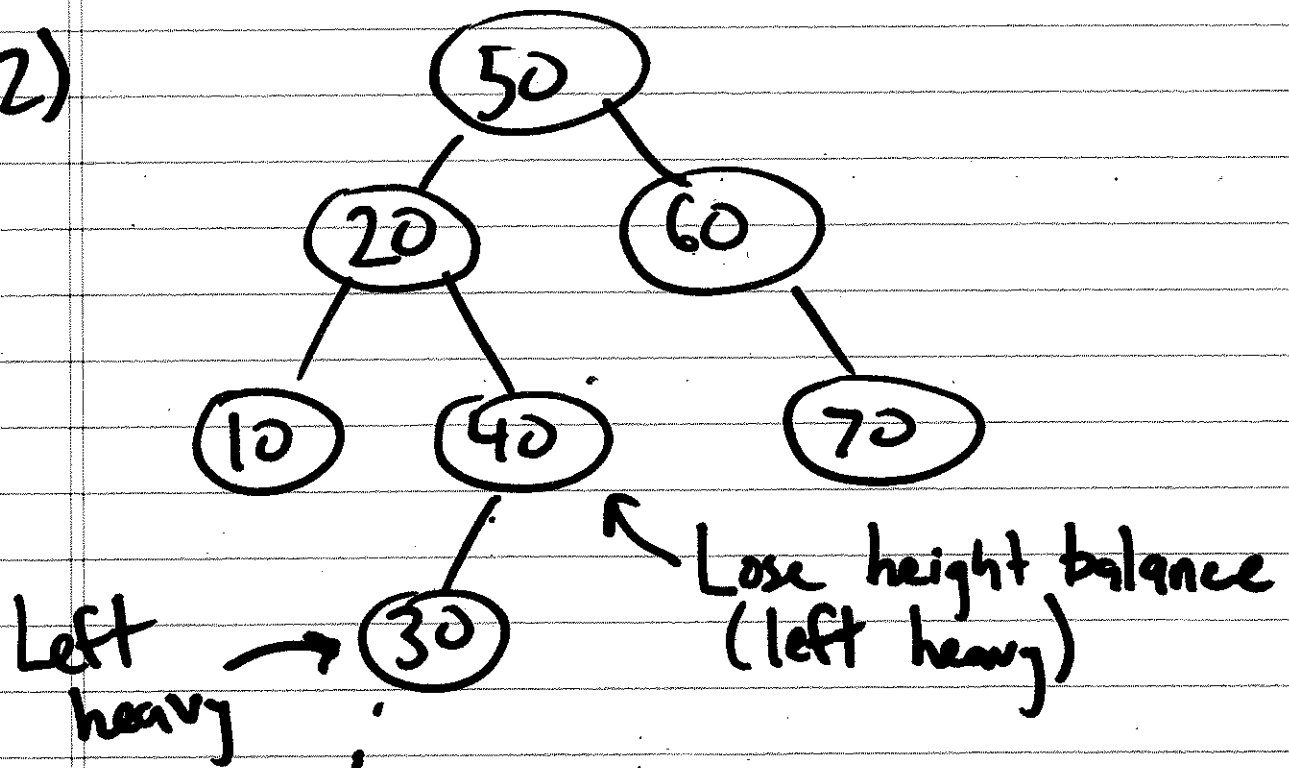
Insert
32 →

32

Rotate left at 20

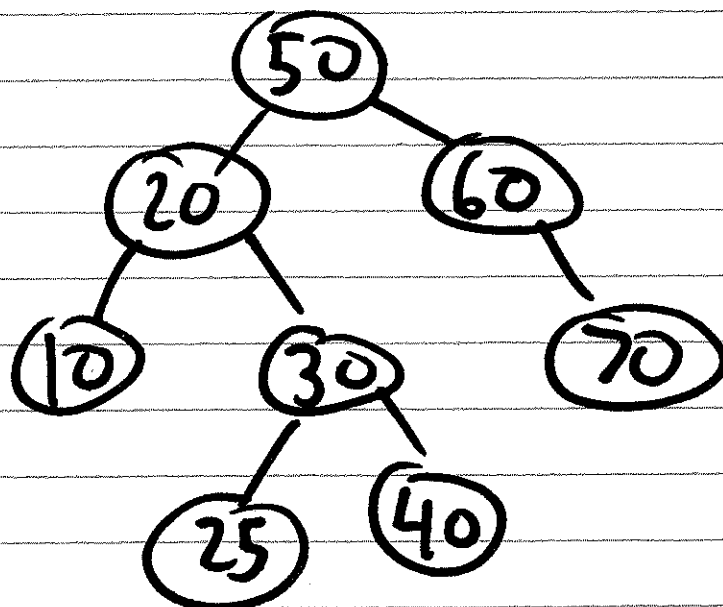


2)

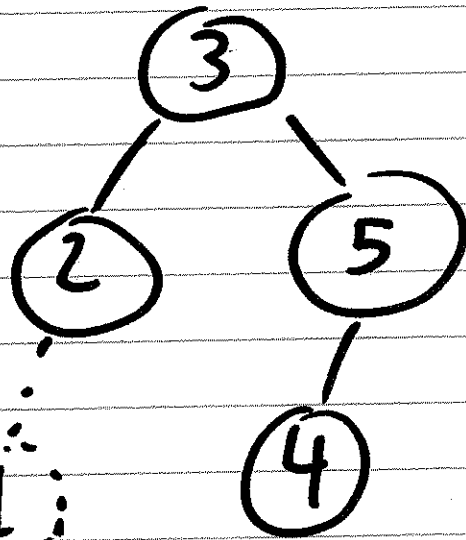


25 ← Insert 25

↓ Rotate Right at 40

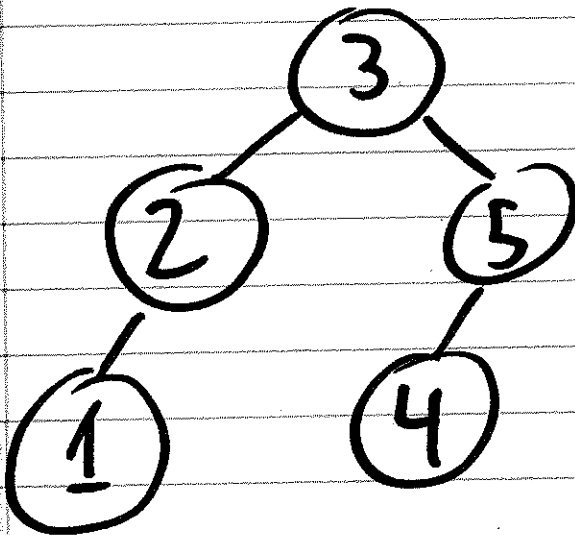


3)

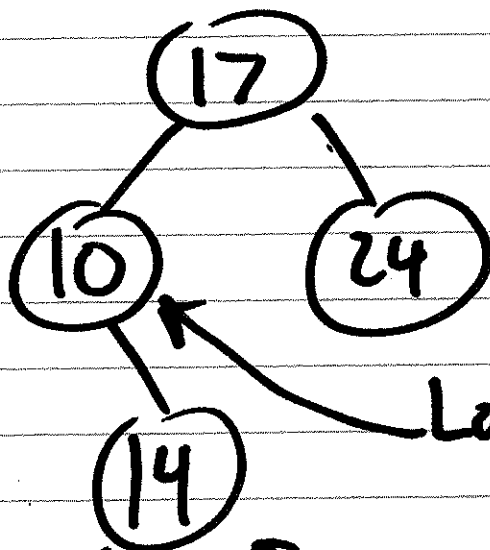


Insert 1

Still height balanced
(no rotations needed)

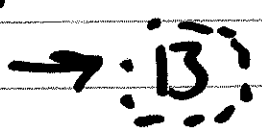


4)



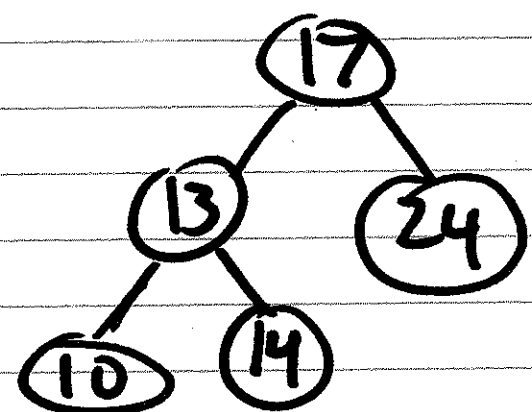
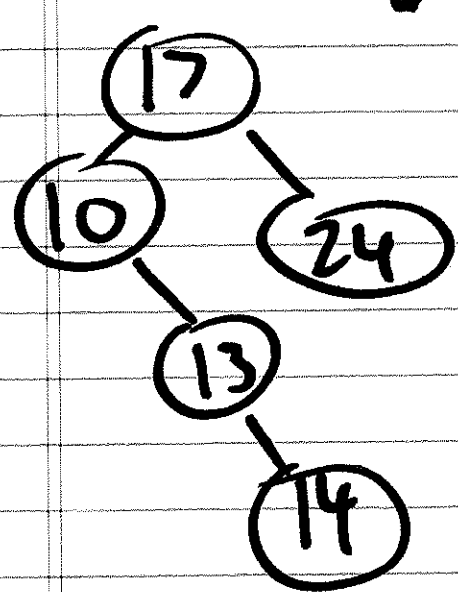
Lose height balance
(right heavy)

Insert
13 →



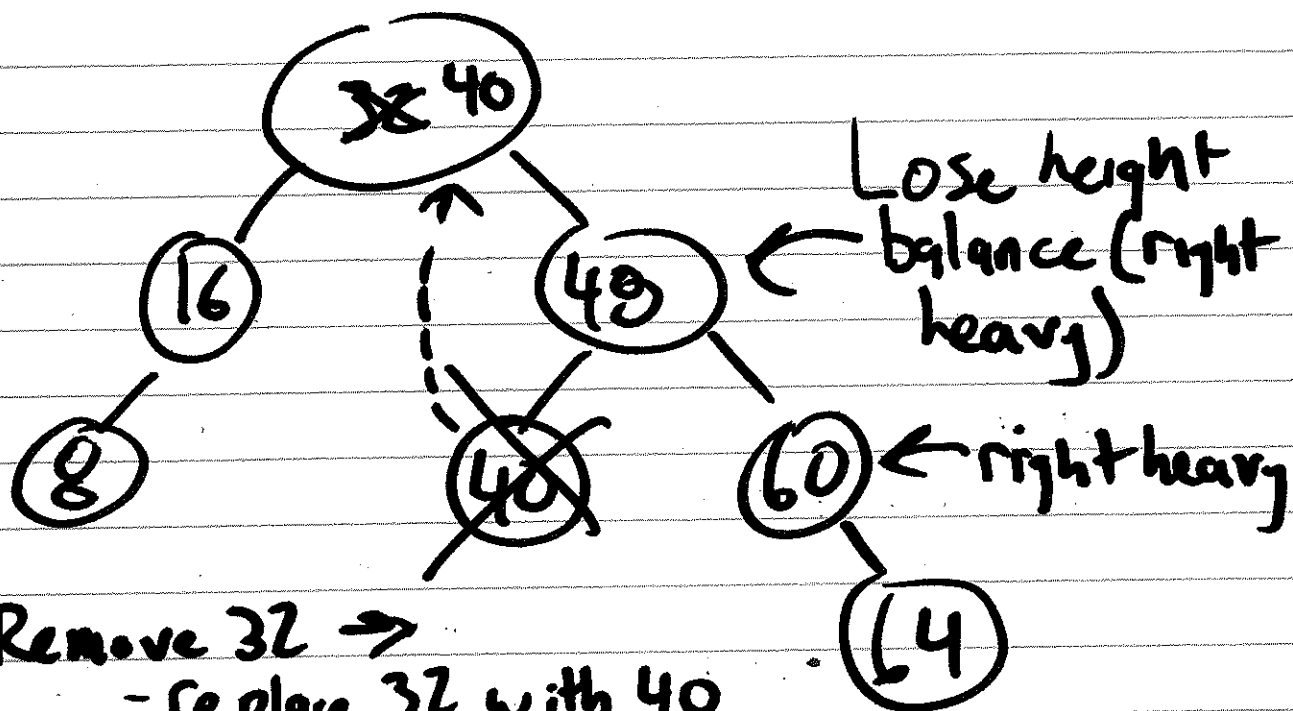
left heavy

Double rotation needed:
First, rotate right at 14



Second, rotate
left at 10

5)



Remove 32 →

- replace 32 with 40 (in-order successor)
- remove 40

Rotate left at 48

