

Homework Sheet 5

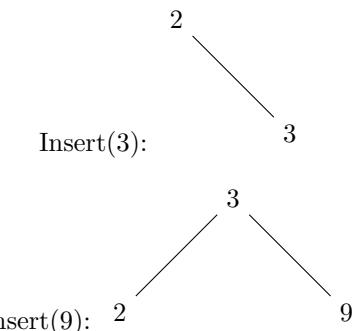
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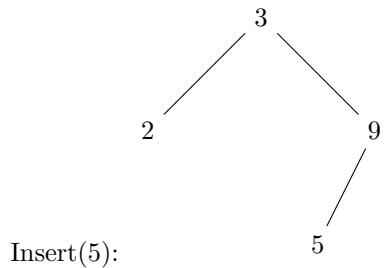
Exercise 1

We begin with an empty AVL tree and perform the following operations step by step:

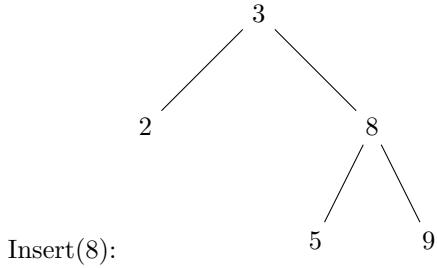
1. Insert(2)
2. Insert(3)
3. Insert(9)
4. Insert(5)
5. Insert(8)
6. Insert(6)
7. Remove(8)
8. Remove(5)
9. Insert(4)
10. Insert(5)
11. Remove(6)

Insert(2): 2

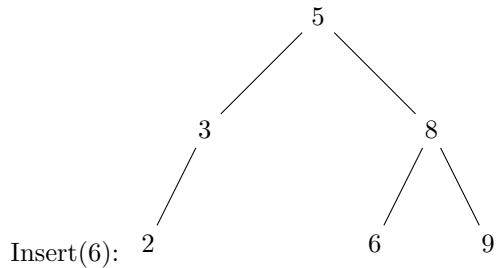




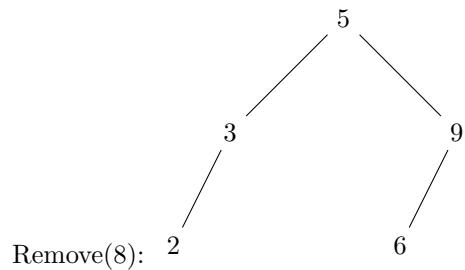
Insert(5):



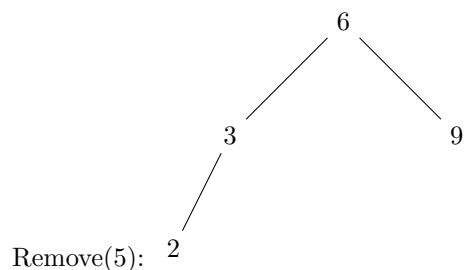
Insert(8):



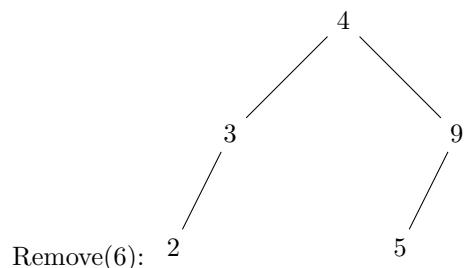
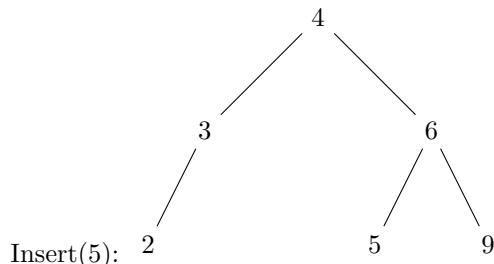
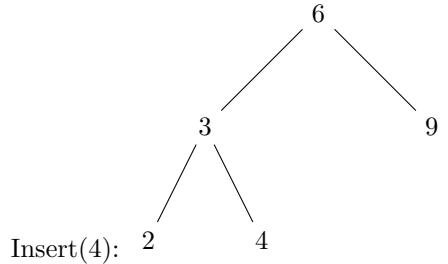
Insert(6):



Remove(8):



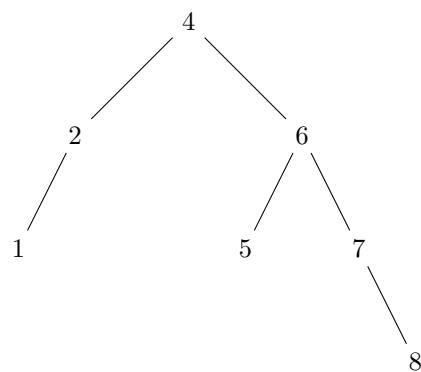
Remove(5):



Exercise 2

(a)

An AVL tree of maximum height with 7 nodes:



An AVL tree of maximum height with 12 nodes:

