

Homework 8

1 Question 1

Show the result of inserting 3, 1, 4, 6, 9, 2, 5, and 7 in an initially empty binary search tree. Then show the result of deleting the root.

2 Question 2

Show the result of inserting 2, 1, 4, 5, 9, 3, 6, and 7 into an initially empty AVL tree.

3 Question 3

Show the result of inserting 2, 1, 4, 5, 9, 3, 6, and 7 into an initially empty AA tree.

4 Question 4

Show that every AVL tree can be colored as a red-black tree. Do all red-black trees satisfy the AVL tree property?