Reading Exercise 1

Due: Friday 1/16 at the beginning of class

Read section 12.3 of the text on the insert and delete operations in binary search trees (called Tree-Insert and Tree-Delete in the text). Then complete the following, which can be submitted on paper or via email.

1. (4 points) Draw the binary search tree (not red-black tree) that results from inserting the following values (in this order) into an initially-empty tree: 100, 42, 60, 106, 18, 110, 140, 102, 20, 51, 72, 216, 20. You only need to draw the final tree that results.

2. (2 points) Draw the binary search tree that results from deleting the element 110 from the tree you drew for the previous problem.

3. (2 points) Draw the binary search tree that results from deleting the element 42 from the tree you drew for the previous problem.