Today: AVL trees. § 19.4.
Next class: Quiz; Red-Black trees. § 19.5.

1. Write your group members' names below. Underline your name.

2. Depict the *AVL tree* resulting from the insertion of the following keys, in the order listed, into an empty tree.

$$8, 5, 21, 3, 9, 7, 1, 2, 11, 14$$

Show all intermediate steps. In particular, depict the state of the tree immediately following each insertion, before and after any necessary balancing operations. Identify the type of each balancing operation used and the root of the subtree to which it is applied.

3. Depict the AVL tree resulting from the deletion of each of the following keys, in order, from the last tree of Question 2.

$$14, 7, 8, 1$$