© 2013 Sudarshan S. Chawathe

Today's topics: Sorting, AA-trees.  $\S$  8 19.6. Next class: Sorting.  $\S$  8.\*.

- 1. List the members of your group below. Underline your name.
- 2. Depict the action of *insertion sort* on the following array. Assuming a typical nestedloop implementation, depict the state of the array after each iteration of the outer loop.

49, 38, 9, 27, 39, 54, 8, 1, 3, 76

3. Repeat Question 2 for selection sort.

4. Depict the AA-tree resulting from the sequential insertion of

 $1, 2, 3, \ldots, 10, 20, 19, \ldots, 11$ 

into an empty tree. Depict all intermediate trees. Clearly label any restructuring operations used.