

Today's topics: AA-trees, sorting. Textbook §§ 19.6; 8.1–8.3., Andersson paper.¹

Next class: B-trees, Textbook §§ 19.7, 19.8.

Reminder: Read material *before and after* class.

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 nested-loop implementation, depict the state of the array after each iteration of the outer loop.

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

¹Arne Andersson, “Balanced Search Trees Made Simple,” in *Proceedings of the Workshop on Algorithms and Data Structures* (Montreal, Canada, 1993).

3. Depict the *AA-tree* resulting from the sequential insertion of

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

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