Today’s topics: AA-trees, sorting. Textbook §§ 19.6; 8.1–8.3., Andersson paper.\(^1\)
Reminder: Read material \textit{before and after} class.

1. List the members of your group below. Underline your name.

2. Depict the action of \textit{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.

\begin{align*}
49, 38, 9, 27, 39, 54, 8, 1, 3, 76
\end{align*}

\footnote{Arne 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

\[ 1, 2, 3, \ldots, 10, 20, 19, \ldots, 11 \]

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