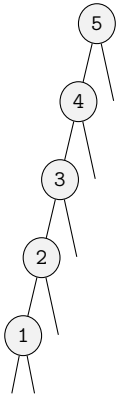


**Today:** Splay trees; §§ 22.\*.

**Next class:** {merge, quick, heap, ...}sort. §§ 8.5, 8.6, 21.5, 21.6; Reynolds's paper.<sup>1</sup>

**Reminders:** Newsgroup is required reading (and writing); use to advantage.

1. Write your group members' names below. Underline your name.
  
2. Depict the transformations to the following *top-down splay tree* in response to the access pattern 1, 2, 3, 4, 5. Depict all splay operations clearly, including the left and right trees, and highlight the tree after all operations for each insertion have completed.



<sup>1</sup>Samuel W. Reynolds, "A Generalized Polyphase Merge Algorithm," *Communications of the ACM* 4/8 (1961).

3. Trace the result of inserting the keys  $1, 2, 3, \dots, 7$  into an initially empty bottom-up splay tree.