

Today's topics: Red-black trees. § 19.5.

Next class: Quiz; sorting §§ 8.1–8.3. Reminder: Read material *before and after* class.

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

2. Describe, in your own words, the *essence* of the *bottom-up* insertion algorithm for *red-black trees* (approx. 100 words). Depict the red-black tree resulting from the sequential insertion of

1, 2, 3, ..., 10, 20, 19, ..., 11

into an empty tree, using bottom-up insertion. All intermediate trees need not be depicted, but it is advisable to depict at least a few.

[additional space for answering the earlier question]

3. Repeat Question 2 for *top-down insertion*.

[additional space for answering the earlier question]