© 2012 Sudarshan S. Chawathe

Today's topics: Red-black trees. Textbook sections: Chapter 19.5.

Next class: Quiz; Textbook §§ 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

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

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]