© 2018 Sudarshan S. Chawathe

Today Time complexity. §§ 7.*. **Next class** Quiz 2. More time-complexity. **Reminders** Newsgroup.

- 1. List the members of your group below. Underline your name.
- 2. Elaborate on the textbook's Example 7.3 by proving that the values c = 6 and $n_0 = 10$ have the properties claimed there.

3. Prove or disprove: $4^{O(\lg n)} = O(n^k)$ for some k.

4. Outline, in as much detail as you can, a Python program that operates as the Turing machine M_1 (p. 279) does, being as faithful to its low-level operations as possible. Repeat for machines M_2 and M_3 .