Outline for April 6, 2007

*Question:* Do you find it easier to keep track of your schedule on a computer, cell phone, paper, or in your head?

1. **Greetings and felicitations!**
   a. Lab exercise 1 due tonight at 11:59PM
   b. Prospectus due in class on Monday

2. **Operating system configuration**
   a. Linux/UNIX systems: based on numerous configuration files scattered throughout system
   b. Windows: uses registry; keys are are indices used to look up information
      i. HKEY_CLASSES_ROOT: how system treats files based on extension
      ii. HKEY_CURRENT_USER: individual settings for this user, such as screen color
      iii. HKEY_LOCAL_MACHINE: the hardware and software, including configuration information and past hardware
      iv. HKEY_USERS: generic information, such as about user profiles and the desktop before users log in
      v. HKEY_CURRENT_CONFIG: configuration information about the current hardware and software

3. **Ideas behind transistors**
   a. Review binary system, bits
   b. Transistors combine to manipulate numbers, add them, and otherwise change them

4. **Transistors and RAM**
   a. Writing data to RAM
   b. Reading data from RAM

5. **How a computer adds**
   a. AND gate
   b. OR gate
   c. XOR gate
   d. Half adder
   e. Full adder