Outline for September 28, 2012

Reading: §1, 5

1. About the class
   a. Instructors and TAs
   b. Class web site, handouts
   c. Smartsite and submitting homework
   d. Homework, grading, and extra credit
2. What is a computer?
   a. Computer programs
   b. Execution
3. Storing data
   a. Bits and bytes
   b. Binary number system (base 2)
   c. Hexadecimal number system (base 16)
4. Software and hardware
   a. Functional description of a computer
   b. How the software controls the hardware
   c. How the hardware limits the software
5. Python
   a. What is Python?
   b. Why Python for this class?
6. Programming languages
   a. High-level languages: semantics and syntax
   b. Low-level languages: assembly language, machine language