Outline for February 13

Reading: *text*, §7   **Assignments:** Homework 3, due on February 15 at 11:55pm

1. Characters and representations
   a. How characters are represented internally [*chr.py, ord.py*]
   b. Figuring out the position of a character in the alphabet
2. Files
   a. What is a file?
   b. What can you do with it? (For example, read, write, append)
   c. Types of files (text, binary)
3. File Input and output for text files
   a. Opening and closing: `open(`*`filename, mode`*`), close()`
   b. Reading: `readline(), readlines(), read(), read(`*`n`*`)`
   c. Writing: `write(`*`str`*`), writelines(`*`list`*`)`
4. Examples
   a. Print out a named file [*fileio1.py*]
   b. Print out a named file and prepend line numbers [*fileio2.py*]
   c. Store the output in *filename*.lst [*fileio3.py*]
   d. Same, but use `print` rather than `write` [*fileio4.py*]
5. Examples
   a. Put lines in a file in random order [*randlines.py*]
   b. Read in a list of words from a file, then search it as requested; similar to linear search program [*search-1.py*]
   c. Now see how many words you checked total [*search-1c.py*]