Lecture 11: November 5, 2019

Reading: §7   **Assignments:** Homework 3, due on November 8 at 11:59pm

1. Files
   (a) What is a file?
   (b) What can you do with it? (For example, read, write, append)
   (c) Types of files (text, binary)

2. 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`*`)`

3. 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*]

4. 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*]