

## Outline for November 10, 2020

**Reading:** §7, 9

**Assignments:** Homework 3, due November 13, 2020

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1. Example: word frequency count
  - (a) Unsorted, using `dget()` [*wfc-1.py*]
  - (b) Sorted alphabetically [*wfc-2.py*]
  - (c) Sorted alphabetically, but dictionary order (note `key=str.lower()` in `sorted` [*wfc-2a.py*])
  - (d) Sorted by frequency (treat `lambda x: x[1]` as an idiom to reference the *value* of the dictionary entry, not the *key*—to go from highest to lowest, replace `x[1]` with `-x[1]`) [*wfc-3.py*]
  - (e) Sorted by frequency first, then alphabetically—note use of function `alphafreq(x)`; you can use any function here, and the parameter is the item [*wfc-4.py*]
2. Sorting the dictionary
  - (a) `sorted` sorts based on keys
3. Files
  - (a) What is a file?
  - (b) What can you do with it? (For example, read, write, append)
  - (c) Types of files (text, binary)
4. File Input and Output for text files
  - (a) Opening and closing: `open(filename, mode), close()`