Outline for May 18, 2009

Reading: §11.6

1. Dictionary
   a. Collection of key-value pairs
   b. What a “mapping” is
   c. Mutable
2. Creating dictionaries
   a. Using d = {}
   b. Using d = dict()
3. Methods for dictionaries
   a. D.has_key(k): True if dictionary D has key k; else False
   b. k in D: same as D.has_key(k)
   c. D.keys(): list of keys in D
   d. D.values(): list of values in D
   e. D.items: list of tuples (key, value) in D
   f. D.get(k, d): if key k in D, return associated value; else return d
   g. del D[k]: delete (k, v) from D
   h. D.clear(): delete all entries in D
4. Sorting the dictionary
   a. keylist.sort() sorts based on keys
   b. keylist.sort(cmpfun) sorts based on cmpfun
      i. Arguments to cmpfun are two (key, value) pairs
      ii. Returns –1 if first > second; 0 if first = second; 1 if first < second
5. Example: word frequency count
   a. Sorted alphabetically (see wfc-1.py)
   b. Sorted by frequency (see wfc-2.py)
   c. Sorted by frequency first, the alphabetically (see wfc-3.py)