Outline for December 3, 2012

Reading: §18

Assignment due: Friday, December 7, 2012 at 11:55 PM

1. Review: dictionary
   a. Collection of key-value pairs

2. Dictionary lookup \( [\text{morse.py}] \)

3. Example: word frequency count
   a. Unsorted \([\text{wfc-1.py}]\)
   b. Sorted alphabetically \([\text{wfc-2.py}]\)
   c. Sorted alphabetically, but dictionary order (note \texttt{key=\texttt{str.lower()}} in \texttt{sorted}) \([\text{wfc-2a.py}]\)
   d. Sorted by frequency (treat \texttt{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 \(-x[1]\)) \([\text{wfc-3.py}]\)
   e. Sorted by frequency first, then alphabetically—note use of function \texttt{alphafreq(x)}; you can use any function here, and the parameter is the item \([\text{wfc-4.py}]\)

4. Tuple
   a. Ordered list of elements
   b. Just like a list, but immutable
   c. Simultaneous assignment an example of it