Outline for November 14, 2012

Reading: §14   **Assignment due:** Wednesday, November 28, 2012 at 5:00 PM

1. Lists
    a. Sequence of values (ints, floats, strings, other lists, etc.)
    b. Denoted by square brackets `[ ]` with values separated by commas
    c. Lists are mutable
    d. How to create a list
2. Type conversion
    a. `str(val)` attempts to convert `val` to a string
    b. `list(sequence)` attempts to convert `sequence` to a list
3. Program to print words in a line [*lines.py*]
4. Program to compute some statistics [*addup.py*]
5. What you can do with lists
    a. Check membership: `in`, `not in`
    b. `+`: concatenation
    c. `*`: repetition
    d. `list[`a`:`b`]`: slice list from a to $b-1$
    e. `del list[item]`: delete `list[item]`; item can be a slice
6. Objects, references, aliasing
    a. For strings, one copy: assume `a = "banana"`
        i. After `b = a` or `b = a[:]`, then `a is b` is `True`
    b. For lists, multiple copies: assume `A = [ 1, 2, 3 ]`
        i. After `B = A`, then `A is B` is `True`
        ii. After `B = A[:]`, then `A is B` is `False`
7. Lists as parameters: can change list elements in function and they are changed in caller [*args2.py*]