Outline for February 13, 2012

Reading: §14

1. Objects, references, aliasing (Correction from last lecture)
   a. Assign “banana” to variables a, b
   b. For strings, one copy (a is b is True) [immutable]
   c. For strings, a = "hello"; b = a; then a is b is True
   d. Also, a = "hello"; b = a[:]; then a is b is True
   e. For lists, multiple copies (a is b is False) [mutable]
   f. For lists, a = [1, 2, 3]; b = a; then a is b is True
   g. But ... a = [1, 2, 3]; b = a[:]; then a is b is False

2. Lists as parameters: can change list elements in function and they are changed in caller [args2.py]

3. List methods
   a. Add elements to, remove elements: L.append(x), L.extend(ls), L.insert(i, x), L.pop(), L.remove(x)
   b. Element ordering: L.reverse(), L.sort()
   c. Other: L.count(x), L.index(x)

4. Example use: linear search [linsearch.py]

5. Tuples
   a. Used to group data
   b. Like lists, but immutable