

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