Outline for October 29, 2020

Reading: §8

1. I have to change my office hours tomorrow. I am moving them to 3:30pm–4:30pm.

2. 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

3. Lists and strings [datecvr.py]

4. Program to print words in a line [lines.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[i]: delete element list[i]; i can be a slice

6. 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)

7. 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