Outline for October 20, 2022

Reading: §4.5 **Assignments:** Homework 2, due October 20, 2022

- 1. Using random numbers
 - (a) Problem: compute π by tossing darts at a unit square
 - (b) First build routine to simulate dart toss at unit square [mc-1.py]
 - (c) Then build routine to see if co-ordinates are in unit circle [mc-2.py]
 - (d) Then build routine to read in number of tosses [mc-3.py]
 - (e) Put it all together [mc-4.py]
 - (f) Graphics! [mc-5.py]
- 2. More recursion
 - (a) Sum of digits [sumdigits.py]
 - (b) Greatest common divisor [gcd.py]
 - (c) Nested lists: is an item in a list? [isinlist.py]