Outline for April 24, 2014

Reading: *none* **Assignment due:** May 2, 2014

1. Finishing up calculating π using a Monte Carlo method
   a. Fifth step: plot the points [*mc5.py*]
   b. Sixth step: add the results to the plot [*mc6.py*]
2. How the `for` loop actually works
   a. For variable loops through the list
   b. Iterator: every time it is called, generates next item in the list
3. Scope: global, local, parameters [*scope.py*]
4. Handling exceptions
   a. `except` [*except0.py*]
   b. `except error` [*except1.py*]
   c. `else` [*except2.py*]
   d. `except error as msgvar` [*except3.py*]
   e. `finally` [*except4.py*]
   f. Exceptions in a function: who handles them? [*except5.py, except6.py*]
   g. Using global variables as error flags [*except6a.py*]
   h. `raise` [*except7.py*]
5. Common exceptions
   a. ZeroDivisionError — attempt to divide (or take the remainder of) something by 0
   b. TypeError — operation or function applied to operand of wrong type
   c. SyntaxError — Python parser encountered a malformed statement
   d. NameError — local or global name is not found
   e. ValueError — built-in function or operation applied to operator with illegal value
   f. EOFError — input function encounters an end of file
   g. Keyboard Interrupt — user hit the interrupt key (usually control-C)