Outline for January 7, 2019

Reading: §1

1. About the class
   a. Instructor
   b. Class web site, handouts
   c. Canvas and submitting homework
   d. Homework, grading, and extra credit
2. Python
   a. What is Python?
   b. Why Python for this class?
   c. Compilers, assemblers, interpreters
3. How to write a program; example is making change [*change-write.py*]
   a. Goal and general algorithm idea
   b. Representing data and basic program structure
   c. Translating this into a programming-like language
   d. Translating that into Python
   e. Defensive programming and debugging
4. Python, files and shells
   a. Python: programming *language* that you use to tell the computer what to do
   b. Shell: what you can type Python statements directly into, to see what they do
   c. IDLE: the program that *interprets* Python statements (executes the Python program)
   d. File: type Python statements into this, and then have IDLE execute those statements by running the program in the file
5. First program: hello, world [*hello0.py*]
   a. Explain printing
   b. Demonstrate program in IDLE