

Outline for January 11, 2012

Reading: §1

1. IDLE
 - a. How to use it
 - b. How to start, open a new window
 - c. Python shell, prompt
2. Example using IDLE: hello, world
 - a. Explain printing
 - b. Demonstrate program in IDLE
3. Second example: compute $2 + 2$, properly labeled [*twoplustwo.py*]
 - a. Difference between `'2 + 2'`, `2 + 2`
 - b. Print statements usually end lines
 - c. Getting print statements not to end lines
4. Exceptions [*divby0.py*]
 - a. Division by zero
 - b. How you handle it
5. Third example: chaos program, version 1 [*chaos1.py*]
 - a. Comments
 - b. Function `input()` gets input as a string from user
 - c. Function `float()` converts data to a floating point number
 - d. Assignment to variable; evaluate right hand side first
 - e. For loop in detail
 - i. Built-in `range()` function
 - ii. Index variable `i` initialized to 0
 - iii. Loops
 - iv. Expression using multiplication, subtraction, and variables
 - f. Behavior with initial values of 0.25 and 0.26
6. Fourth example: chaos program, version 2, error handling [*chaos2.py*]
 - a. What if the user types in a non-number?
 - b. What if the user types in a bad number?