Outline for January 10, 2017

Reading: §2

1. Input
   a. `input`, `raw_input`
   b. `try ... except`
2. Simultaneous assignment [swap.py]
   a. Simple assignment: `variable = expression`
   b. Simultaneous assignment: `variableA, variableB = expressionA, expressionB`
3. Decision structures [if0.py]
   a. If statement
   b. Executes once, based on condition
   c. Syntax
4. Conditions
   a. Resolves to boolean value
   b. Literal booleans: True (1), False (0)
   c. Testable as `true` or `false`
   d. Relational operators
      i. Use two arithmetic expressions connected with relational operators to create a boolean
      ii. Relational operators: `>`, `>=`, `<`, `<=`, `==`, `!=`
      iii. Precedence: resolved after arithmetic operators
         iv. `6 > 2 + 3; "UCD" == "Sac State"`
5. Two-way decisions [if1.py]
   a. `if ... else` statements
   b. One condition, two possible code blocks
   c. Syntax
   d. `else` very powerful when the positive condition is easy to describe but not the negative
   e. String comparison example
6. Multi-way decisions [if2.py]
   a. Can execute code based on several conditions
   b. `elif (else if)`
   c. Syntax
   d. `else` only reached if all previous conditions false
   e. Nested if statements