Outline for January 10, 2018

Reading: §2, 3

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