Ch3 Review

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CMPT14x
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Review of last time (§2.6-3.13)

- Formatted output
- abs(), +=, string.capitalize()
- Qualified import

- Selection: if, if..else.., if..elif..else
- Loops: while
  - Sentinel variables
  - Loop counters
  - Using mathematical closed forms instead of loops
- For loops

What's on for today (§4.1-4.3)

- Procedures (functions, subroutines)
  - No parameters
  - With parameters
  - Scope
  - Global variables (why not to use them)
- Functions (return a value)
- Call-by-value vs call-by-reference

Procedures

- Fourth program structure/flow abstraction is composition
- This is implemented in Python using procedures
  - Also called functions, subroutines
- A procedure is a chunk of code doing a sub-task
  - Written once, can be used many times
- We've already been using procedures:
  - print, input, raw_input, etc. (not if or while)

Procedure input and output

- Procedures can do the same thing every time:
  - print # prints a new line
- Or they can change behaviour depending on parameters (arguments) input to the procedure:
  - print("Hello!") # prints the string parameter
    - List of parameters goes in parentheses
  - (print is special and doesn't always need parens)
- Procedures can also return a value for use in an expression:
  - numApples = input("How many apples? ")

TODO

- Quiz ch2-3 on Mon
- Lab02 due next Wed: 3.14 # 16 / 17 / 23a / 23b / 23c
- Read through §4.7 and Py ch5 for Mon