“All your troubles are due to those ‘ifs’,” declared the Wizard. If you were not a Flutterbudget you wouldn’t worry.”

- The Emerald City of Oz by Frank Baum
Announcements

• Test 1 is Thursday!
  – You must take the exam in your lecture section
  – Accommodations for test 1? Must fill out form on website

• Assignment 4 due Tuesday, Feb 21

• See Regrades form on website

• No labs this week

• No consulting hours Thurs night

• Exam 1 Review session – LSRC B101
  – Wednesday, 7:15pm
Exam logistics

- Exam is in the regular classroom
- Only need a pen or pencil
- No scratch paper
- Will give you a reference sheet of Python information with the test (see resources page)
- Closed book, closed notes, closed neighbor
- Covers lecture, lab and assigned reading, assgnmtns, appts
- Have put old quizzes back up as quiz review
  - This is NOT for a grade, for studying only
The best way to study

• Write code on paper!

• Resources page has old tests and solutions
  – Try writing code, then look at solutions

• Rewrite an APT

• Rewrite code we did in lecture

• Rewrite code we did in lab
What we have not done

• Test 1 from Fall 2014 on we have covered everything.
• If looking at old exams, note we **have not done** the following:
  – List comprehensions
  – Code in square brackets such as
    ```
    y = [w for w in alist]
    ```

There may be other things…. If it looks strange, it might be we haven’t done it…..
Understand

• What is the difference between:
  – [ ] and ( )
  – w = and w +=
  – print value and assigning value to a variable
  – print and return
  – When do you print? When do you return?
  – Does a function print or return?

• if, for, range, strings, lists
  – Understand format and how they work

• Parameters vs arguments
Writing functions with formulae

bit.ly/101s17-0214-1
Writing functions with formulae

• Using extra variables: can be really smart
  – Helps in making each line simple
  – Easy to correct if you've made a mistake

• See `triangleArea`, what about other math symbols and formula?
  – What do +, -, *, /, % do?
  – What about `math.sqrt` or `5**0.5` or `math.sin` …
Accumulating in a loop

• If you are going to return a string
  – Initialization, return value, how to "build it"

• If you are going to return an int (counter)
  – Initialization, return value, how to "build it"

• If you are going to return a list
  – Initialization, return value, how to "build it"
Counting 'a's in a string, 'fox' in a list?

• What Python functions/methods help
  – If you forget, how can you recreate yourself?
  – See exam Python reference sheet
Basic List/file Processing

bit.ly/101s17-0214-2
Review Old Exam Questions