Announcements

- Please turn in HW5 now if you had internet problems last night

- HW 6 + 7 are posted
Opening files: a note

The syntax I gave you:

\[ x = \text{file}('\text{name}.txt') \]

This has been replaced in Python 3!

Instead:

\[ x = \text{open}('\text{name}.txt') \]
String formatting: a note

New syntax: `3.5 % mystring`

`3.5f` is a number, `% sqrt(2)`

Our way: `%.1f is an int, %.2f x` is not in Python 3
Modules

Modules are simply files containing python code

Name is same as file name (but w/o .py or .pyc)

We have imported using from command:

from csl.graphics import *

from math import sqrt

from hw5 import Account
Importing

- Allows us to use this code as though it were our own.

We say all the things imported are in our current environment

Only problem:

If module uses same variables, there is a conflict!

This is called name pollution.
What to do about this:

1. Only import what you need:
   from math import sqrt
   or
   from math import sqrt, pi

2. Use: import math
   Then:
   math.pi

   import hw5
   x = hw5.Account()
Unit testing recap

```python
#define MyClass

if __name__ == '__main__':
    x = MyClass()
    x.function1()
    if x.function2(6) == 'expected result':
        print 'It worked'
```
Other Useful Modules

Over 250 useful Python modules that come by default.

Useful:
- math
- sys:
  - sys
  - sys.stdin
  - sys.argv
- stringIO