Python

Class 8

Overview

1. Announcements
2. Review
3. Q&A
4. Basic assignment

Announcements

- Make assignments due November 20
- Python assignments due December 4

Review

- Python is a fairly intuitive language, I'll focus on quirks
- Mutability
- Real and floor division
- Comprehensions
- Keyword args
- Class definitions
- Dunder methods

Review
Mutability

Review

Real and floor division

- Real division: `/`
- Floor division: `//`

Review

Comprehensions

- List
  - `[ x.attr for x in l ]`
- Set
  - `{ x.attr for x in l }`
- Dictionary
  - `{ k:v*2 for k, v in d.items() }`
- Can have conditions
  - `[ x.attr for x in l if x.cond() ]`

Review

Keyword args

- `somefunc(somearg=3, anotherarg=5)`

Review

Class definition

- `__init__(self, ...)` function as "constructor"

Review

Dunder methods

- Special methods that start and end with `__`
- Provide ability to implement underlying behavior of various operations
- Examples:
  - `__add__`
  - `__truediv__`
  - `__getitem__`
- https://docs.python.org/3/reference/datamodel.html#special-method-names

Q&A

Basic assignment