

# Python

## Class 8

# Overview

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

# Announcements

- Make assignments due March 20
- Python assignments due March 27

# 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