

Discussion 07

Object Oriented Programming

Aditya Balasubramanian

`aditbala [at] berkeley [dot] edu`

Slides available at `teaching.aditbala.com`

Announcements

- Homework 5 is due Thursday 3/9.
- No live lecture on Wednesday 3/8
 - Watch the 5 lecture videos before attending discussion section.

Object Oriented Programming (OOP)

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- What is OOP?
 - Use of classes to define our own data types
 - More abstraction
 - Reuse code with inheritance
 - MORE ABSTRACTION
- Those with prior experience in Java are familiar
- You have already used OOP!
 - `list.append`
 - `append` is a method belonging to the `list` class

Some Terminology

- Class
 - Template for creation of object
- Object
 - An instance of a class
- Variables
 - Instance Variables
 - property specific to an object
 - Class Variables
 - property shared between all instances of a class
- Method
 - Function that is bound to a class

Functions vs Methods

- Methods need to take in `self` as an object
- `self` argument tells which object to call method on
- Two methods of writing method calls
 - `Class.method(self, args)`
 - `object.method(args)`
 - `self` is automatically set as object
- Demo

Worksheet

Thank you!

Anon Feedback -> <https://tinyurl.com/adit-anon>