

# Discussion 07

## Object Oriented Programming

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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>**