CS 6510
Programming Languages

Spring 2017

Instructor: Matthew Flatt
Course Details

http://www.eng.utah.edu/~cs6510/
Lectures are Online

After today, all slide presentations are online

• Watch the videos before class

• Class is for more examples and homework solutions
  ◦ a.k.a. “recitation”
  ◦ guideline: no new material introduced in class
Programming Language Concepts

This course teaches concepts in two ways:

By implementing **interpreters**

- new concept $\Rightarrow$ new interpreter

By using **Racket** and variants

- we don’t assume that you already know Racket
Interpreters

An *interpreter* takes a program and produces a result

- DrRacket
- x86 processor
- desktop calculator
- *bash*
- Algebra student

A *compiler* takes a program and produces another program

In the terminology of programming languages, someone who translates Chinese to English is a *compiler*, not an *interpreter*. 
Racket and plai-typed

Lisp ➔ Scheme ➔ Racket

Racket is

• a programming language
• a family of programming languages
• a language for creating programming languages

... including plai-typed

Racket ➔ plai-typed ⇔ ML

PLAI = Programming Languages: Application and Interpretation, the textbook
plai-typed

See quick-ref.rkt
Homework 0

- Create handin account
- Racket/plai-typed warm-up exercises

Due Friday, January 13