CSC151.02 2014S, Class 03: An Introduction to Scheme

Overview

- Preliminaries.
  - Admin.
  - Assignments.
  - Questions.
- A bit about the course.
- Very little Scheme.
- Lab.
- Debrief.

Preliminaries

Admin

- Welcome to our new mentor, Helen D!
- Yes, I’ll take attendance again.
  - And please make sure to preface your comments/questions with your name.
- I got over 200 email messages from students on Tuesday.
  - (Yes, it’s my fault for having students submit homework via email.)
  - So that I can navigate my inbox, it’s very important to me that you take the time to title your email messages correctly.
  - I plan to go over your HW1 over the weekend.
- Sorry for forgetting to update the link to the current reading. I hope you found it in the syllabus.
- We will have a quiz on Friday. (Parts of an algorithm; A bit of Scheme)
- Extra credit: Thursday extra on summer research in CS, Thursday @ 4:30 in Noyce 3821.
- Extra credit: CS Table Friday at noon in the Day PDR in the Marketplace. The topic is "3D Printing (of Body parts)"
- Extra credit: Theatre Gigante on Friday. Some piece on Spaulding Grey.

Support Infrastructure

- Class mentors
- Tutors most nights (see purple sheet)
- Mentor sessions Thursday night, 7-8, 9-10
- Weekly review session, Thursday 2:15-3:05 (may move)
- I will have a review session at 2:15 p.m. tomorrow.
  - While I don’t expect to have anyone show up, I thought it would be good to get started on the weekly review sessions.
Homework

- There are two readings for Friday’s class, one on numbers and one on symbolic values.
- The first real homework assignment has been posted. It will require some knowledge from Friday’s class, but it might be worth looking at.
  - I will be assigning homework partners on Friday.
- Today’s lab writeup, Extra problem 2
  - Due before class on Friday
  - Email subject: CSC 151.02 Writeup 1: Starting Scheme (YOUR NAME HERE)
  - Email subject: CSC 151.02 Writeup 1: Starting Scheme (Kim Spasaro and Toby Baratta)
  - You can, but need not, write up the lab with your partner.
  - Due "two days" later.

Questions

A bit about the course

- Goals
  - Help you learn about CS: Algorithms, Data Structures etc.
    - Write your own
    - A few classics
  - Make you a better problem solver
  - Some programming skill applicable to many domains
  - Skills beyond CS - Group work and more
- Differences
  - Methodology - Learn by doing, not listening
  - Different way of thinking

Very little scheme

- Design algorithms
- Put them into play (+ 2 3)
  - "Open paren, name of procedure, space arguments close paren"
  - (define sqrt171 (sqrt 171))

Lab

Important keystrokes:

then P : Bring back the previous expression -up-arrow : Bring back the previous expression
Using max:

\[
\text{(max val1 val2 val3)} \Rightarrow \text{the largest of the three values}
\]

\[
\text{(max 7 1 2 6 5)} \Rightarrow 7
\]

Samuel A. Rebelsky, rebelsky@grinnell.edu

Copyright (c) 2007-2014 Janet Davis, Samuel A. Rebelsky, and Jerod Weinman. (Selected materials are copyright by John David Stone or Henry Walker and are used with permission.)

This work is licensed under a Creative Commons Attribution 3.0 Unported License. To view a copy of this license, visit http://creativecommons.org/licenses/by-nc/3.0/ or send a letter to Creative Commons, 543 Howard Street, 5th Floor, San Francisco, California, 94105, USA.