CSC151.02 2013F, Class 04: Computing with Symbols and Numbers

Overview

- Admin.
- Values and Types.
- Lab.
- Kinds of Numbers. (Probably not)
- The Modulo operation. (Depending on how things go)

Admin

- Congratulations on finding the correct room! (I would have gone to the wrong room if not for Blake)
- Note: Elevators require much more energy than you do. Some people are injured and need the elevator. Please use the stairs if you can.
- No clicker questions today!
- In case it wasn’t clear, we’re still doing a bit of “learning how to use the lab equipment”.
- EC Opportunities:
  - CS Table this Friday (Turing on AI)
  - Humanities Center Speaker Sarah Hendron Wed., Sept. 11, 7:30 p.m., JRC101 Waking the Machines: Art, Design, and Adaptive Technology
- Reading for Friday: Drawings as Values
  - (We may be updating it, so please wait until tonight to read it.)
- Quiz Friday! Ten minutes, written, syntax need not be exact. Typically two questions of five points each. We try to be straightforward.
- Assignment 2 is ready. We’ll spend a few minutes looking at it.
  - Note that it has a prologue and epilogue.
  - Note that you have different partners (listed online).
  - Questions:
    - What does "Work together" mean? Face to face, in the same room, working on the same problems.
    - How many email messages per group? One
    - Outside of class
- Mentor Sessions Thursday 7:30-8:30 p.m. in CS commons!
Values and Types

Different things are, well, different. So we assign values (and variables) to categories.

- Jar
- Integer
- Text

Computer scientists look at a variety of issues related to types * Example: Integers * Identify the values 0, 1, 2, 3, 4, -1, -2, -3, ... * Sometimes identify rules for giving the values * The positive integers * 1 is a positive integer * If you add 1 to a positive integer, you get a positive integer * Identify the operations we can perform on those values add, subtract, multiply

You will learn a lot of types this semester. For each one, figure out * What operations can/should I use? * What values are in the type? * How do I notate these values

A sample type: Punctuation * We can list all of the elements: star (notated *), plus (notated +), comma (notated ,), semicolon

Lab

Kinds of Numbers

The Modulo operation

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