CSC 151 Spring 2020
Topic: List Recursion

March 6, 2020

Day 20

Agenda for today

- Peer Support Opportunities
- Quiz 6 Topics
- Exam 2 Reminders
- List Recursion
- Lab
- Reflection
- Wrap-up

Peer Support Opportunities

- Orchestra Concert, Saturday at 2pm

Quiz 6 Topics

Recursion
Verifying Preconditions

Exam 2 Reminders

Will be posted by 5:00pm today, due next Thursday.
Open Notes/Book/Web with citations.
You may only ask me for help – no one else.

Getting Started:

- Download Starter Code
- Generate a random ID
- Read every problem carefully, as well as Exam Procedures

Tips:

- Start Early – Don't Panic
- Save Often
- Ask me for help

There's more to Life than CS:

- Do the Prologue & Epilogue, document your time

List Recursion

Assume we have the procedure (westernmost city1 city2)
Finish the following recursive procedure:

```
(define westernmost-city
  (lambda (zips)
    (if …
        …
        …. )))
```

List Recursion

Assume we have the procedure (westernmost city1 city2)
Finish the following recursive procedure:

```
(define westernmost-city
  (lambda (zips)
    (if (null? (cdr zips))
        (car zips)
        (westernmost (car zips) (westernmost-city (cdr zips)) )
         )))
```

Lab Time

Start with the person on the East side of the room.

Reflection Time

Our topic for Monday is **Numeric Recursion.**

Given that today's topic for reading was **List Recursion**, what do you think **Numeric Recursion** will look like?

Try to be as specific as possible. Talk about the base case and recursive case. Can you guess a 'common format'?

Upcoming Work

Please submit Exercise 6 by Monday at 10:30 pm.
Include 6P documentation.
To: csc-151-02-grader@grinnell.edu
CC: Your lab partner
Subject: CSC 151-02 Lab 3/6

Reading for Monday
Finish today's lab before Monday

- Exam 2 Prologue due **Sunday** by 10:30 pm