CSC151.02 2014S, Class 51: Project Assessment: Algorithms

Overview

- Preliminaries.
  - Admin.
  - Questions.
- Additional images.
- Debriefing from image analysis.
- Students discuss programming techniques.
- Programming challenges.

Preliminaries

Admin

- Remember! You have a responsibility to cite all of the resources you use, even if you don’t copy and paste.
- While you may be done with the formal work for CSC 151 Thursday evening, I expect you to show up for the remaining class periods.
- I won’t be able to take notes and show off things simultaneously. Sorry.

Upcoming Work

- Homework for Thursday: Exam 3.
- Reading for Friday: Objects in Scheme
- No lab writeup.

Extra Credit

- CS Extra Thursday at 4:30 in Science 3821: Edward Snowden TED Talk.
- CS Table Friday at noon: Edward Snowden.
- Jazz band 7:30-9:30 Friday night in Sebring-Lewis.

Questions

*Talk about the Moby Dick image.*
• lowercase is turn
• UPPERCASE is forward

Do you need to see tests for the turtle draw text thingy?

No. I can read code.

• Where should I include examples
  ○ The ones that already include examples
  ○ The two vector problems

• Can you give us a hint about problem 9?

```scheme
(define husk
  (lambda (params)
    (cond
      [(fails-precondition-1 params)
       (error "Boy, that was bad input")]
      [(fails-precondition-2 params)
       (error "No, it shouldn't do that either")]
      [else
       (let kernel ([a 1]
                    [b 2])
           ...)])
    )))

or

(define husk
  (lambda (parms)
    (let ([kernel (lambda (a b) ...))]
      (cond
        [(fails-precondition-1 params)
         (error "Boy, that was bad input")]
        [(fails-precondition-2 params)
         (error "No, it shouldn't do that either")]
        [else
         (kernel 1 2)])]))

Do we need a helper for problem 6?

You should not need a helper for problem 6.

For problem 3, can we use a recursive helper?

Not if you want to receive credit for the problem.

You will need to use map or repeat or for-each.

What is the goal in problem 3?
See the whiteboard

*Can I do extra work and prevent a swap in problem 3 from using the same location?*

Sure. But it will be harder.

*What’s the difference between problem 2 and problem 3?*

Problem 2 swaps one pair of elements with specified indices.

Problem 3 swaps n pairs of elements with random indices. It probably uses your solution to problem 2.

*What should I do if I can’t solve problem 2?*

Write problem 3 pretending that you correctly solved problem 3. But you won’t be able to test.

*Should we document tree-balanced? in problem 6?*

Yes. The rule is "document unless told otherwise".

**Additional images**

**Debriefing from image analysis**

**Students discuss programming techniques**

**Programming challenges**

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