**Quiz 0.3b Rubric**

1. (3 points) Fill in the blanks for the procedure that takes the 2nd letter of each word in a sentence and puts it in a word. Assume that each word will always have at least 2 letters. For example,

> (2nd-letter ‘(the fool on the hill))

honhi

> (2nd-letter ‘(the octopus garden))

hca

(define (2nd-letter sent)

( \_\_\_\_\_\_ (empty? sent)

“”

(word (first (bf (first sent))) ( \_\_\_\_\_\_\_\_\_\_\_ ( \_\_\_\_\_\_\_\_\_\_\_\_ )))))

**Rubric:**

if 1 point

2nd-letter 1 point

(bf sent) 1 point

1. (3 points) Write a simple exponent function whose first argument is the base and the 2nd argument is the power. Assume that the power will always be a positive integer.

> (pow 3 2)

9

> (pow 5 3)

125

(define (pow base power)

(if (= power 1)

base

(\* base (pow base (- power 1)))))

**Rubric:**

Grading points:

- base case

- recursive call

- inside each recursive call something is changed

Grade breakdown:

3 points if correct

2 point if it has 2 of the 3

1 point if it has 1 of the 3

1. Complete the two parts dealing with words and exercises below.
   1. (2 points) Write a function that reverses the letters in a word.

> (reverse-word foobar)

raboof

> (reverse-word “”)

“”

(define (reverse-word x)

(if (empty? x)

“”

(word (last x) (reverse-word (bl x)))))

**Rubric:**

2 points if correct

1 point if the structure is correct but code doesn’t work

1. (2 points) Using reverse-word, write a function that reverses each word in a sentence and reverses the order of the words while doing so

> (reverse-everything ‘(hi hello hey hola))

(aloh yeh olleh ih)

> (reverse-everything ‘())

()

> (reverse-everything ‘(foobar))

(raboof)

(define (reverse-everything sent)

(if (empty? sent)

‘()

(se (reverse-word (last sent))

(reverse-everything (bl sent)))))

**Rubric:**

2 points if correct

1.5 points if theres one small issue like they forget a last or bl

1 point if structure is correct but there are two or three issues