Homework, Week 6, part D

December 6, 2013

Look at the function `(game-print)`. It takes a list as an argument. Now, execute each expression from the inside out: `(prin1-to-string)`, `(string-trim)`, and `(coerce)`. Consider the following listing where I used the string "I said "Is that mother's ring?" to the robber."

```
1   [28]> (prin1−to−string ’(this is a list))
2   ”(THIS IS A LIST)”
3   [29]> (string−trim ”() ” (prin1−to−string ’(this is a list)))
4   ”THIS IS A LIST”
5   [30]> (coerce (string−trim ”() ” (prin1−to−string ’(this is a
        list))) ’list)
6   (#\T #\H #\I #\S #\Space #\I #\S #\Space #\A #\Space #\L #\I
        #\S #\T)
7   [31]> (tweak−text (coerce (string−trim ”() ” (prin1−to−string
        ’(this is a list))) ’list) t nil)
8   (#\T #\h #\i #\s #\Space #\i #\s #\Space #\a #\Space #\l #\i
        #\s #\t)
9   [32]> (coerce (tweak−text (coerce (string−trim ”() ” (
        prin1−to−string ’(this is a list))) ’list) t nil)>
10  ”This is a list”
11  [33]>
12
13  ...
14  [51]  ;; I said ”Is that mother’s ring?” to the robber.
15  [52]> (setf x (coerce (string−trim ”() ” (prin1−to−string ’(I
        said ”Is that mother’s ring?” to the robb>
16  (#\I #\Space #\S #\A #\I #\D #\Space #\” #\I #\s #\Space #\t
        #\h #\a #\t #\Space #\m #\o #\t #\h #\e #\r
17   #\’ #\s #\Space #\r #\i #\n #\g #\? #\” #\Space #\T #\O #\
        Space #\T #\H #\E #\Space #\R #\O #\B #\B #\E
18   #\R #\.)
19  [53]> x
20  (#\I #\Space #\S #\A #\I #\D #\Space #\” #\I #\s #\Space #\t
        #\h #\a #\t #\Space #\m #\o #\t #\h #\e #\r
21   #\’ #\s #\Space #\r #\i #\n #\g #\? #\” #\Space #\T #\O #\
        Space #\T #\H #\E #\Space #\R #\O #\B #\B #\E
22   #\R #\.)
23  [54]> (trace tweak−text)
```

```
24  ;; Tracing function TWEAK–TEXT.
25  (TWEAK–TEXT)
26  [55]> (tweak−text x t nil)
```

Here is your assignment: Trace `(tweak-text)` by passing it an appropriate list. The list is composted of single characters, which look like `#\T` `#\Space` `#\?`. For every call to `(tweak-text)` understand EXACTLY what is being passed in the function call, including the second and third arguments, `caps` and `lit`. For every return from `(tweak-text)` understand EXACTLY what is being returned. `(tweak-text)` has six conditions, and you need to understand EXACTLY what each condition does, and why. This is not a trivial assignment, you will probably need to spend a lot of quality time with `(tweak-text)`.