

# Homework, Week 6, part D

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September 29, 2016

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
6 list))) 'list)
7 (#\T #\H #\I #\S #\Space #\I #\S #\Space #\A #\Space #\L #\I
8 #\S #\T)
9 [31]> (tweak-text (coerce (string-trim "()" (prin1-to-string
10 '(this is a list))) 'list) t nil)
11 (#\T #\h #\i #\s #\Space #\i #\s #\Space #\a #\Space #\l #\i
12 #\s #\t)
13 [32]> (coerce (tweak-text (coerce (string-trim "()" (
14 prin1-to-string '(this is a list))) 'list) t nil)>
15 "This is a list"
16 [33]>
17 ...
18 [51] ;; I said "Is that mother's ring?" to the robber.
19 [52]> (setf x (coerce (string-trim "()" (prin1-to-string '(I
20 said "Is that mother's ring?" to the robb>
21 (#\I #\Space #\S #\A #\I #\D #\Space #\" #\I #\s #\Space #\t
22 #\h #\a #\t #\Space #\m #\o #\t #\h #\e #\r
23 #' #\s #\Space #\r #\i #\n #\g #\? #\" #\Space #\T #\O #\
24 Space #\T #\H #\E #\Space #\R #\O #\B #\B #\E
25 #\R #\.)
26 [53]> x
27 (#\I #\Space #\S #\A #\I #\D #\Space #\" #\I #\s #\Space #\t
28 #\h #\a #\t #\Space #\m #\o #\t #\h #\e #\r
29 #' #\s #\Space #\r #\i #\n #\g #\? #\" #\Space #\T #\O #\
30 Space #\T #\H #\E #\Space #\R #\O #\B #\B #\E
31 #\R #\.)
32 [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)`.