Homework, Week 4, part A

November 7, 2013

This builds on the tester you worked on last week. This program contains a data structure that has questions and answers, and three functions, give-test (which gives the entire test), ask-question (which asks individual questions), and list-answers (which lists individual choices for the multiple choice.)

Write a new function that takes a correct answer as an argument, asks the student to enter his answer, compares the student's response with the correct answer, and return 1 if the answers match, 0 otherwise. My function is below. You are allow to peek if you can't figure it out, but try your best before you peek. Here is the output for the function I wrote. Note the return value for the correct and incorrect answers.

```
1  [5]> (get−answer "George Washington")
2  Enter your answer: George III
3  The correct answer is: George Washington
4  0
5  [6]> (get−answer "George Washington")
6  Enter your answer: George Washington
7  Correct
8  1
```

Here is my function. Notice how I use (cond). I can't use (if) because each branch does two things — prints text and returns a value.

```
1  ;; get−answer from student
2  ;; returns 1 if answer is correct, 0 otherwise
3  (defun get−answer (correct)
4    (format t "Enter your answer: ")
5    (let ((answer (read−line)))
6      (cond
7        ((string−equal correct answer) (format t "~%Correct~%")
            1)
8        (t (format t "~%The correct answer is: ~a~%" correct) 0)
            )))
```