

Homework, Week 4, part A

lightprogrtaming.org

September 29, 2016

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~%")
8        1)
9       (t (format t "~%The correct answer is: ~a~%" correct) 0)
10    )))
```