Name:_____ Section:___ Andrew Id: _____

15-112 Spring 2014 Quiz 4a

* 20 minutes. No calculators, no notes, no books, no computers. No lists, maps, sets, or recursion!
* Do not discuss this quiz with anyone until after 5pm today. SHOW YOUR WORK, CIRCLE YOUR ANSWERS.

1. **Free Response: go() (phased step animation)** [50 pts]
   Write the function go() that takes no parameters and when called produces the animation that is being displayed in class during this quiz. You do not need to exactly match the window size and font sizes, but try to be fairly close.

2. **Free Response: longestRun(s,goodChars)** [50 pts]
   Write the function longestRun(s, goodChars) that takes a possibly-empty string s and a second possibly-empty string of goodChars. We will say that a character is "good" if it is in the goodChars string (case insensitively, so "A" and "a" would match). The function should return the length of the longest consecutive run of good characters in the given string s. For example, consider: longestRun("abbcazBbcababb","bz"). This returns 3 (look for "zBb").

3. **Bonus/Optional**: [2.5 pts] What will this print? For credit, be sure to show your work!

```
def f(s):
    i = r = 0
    for v in s.split(","):
        (r, i) = (eval(str(r) + "%*/+-^"[i%5] + v), i-2)
        print r,
f("1,2,3,45,6")
```