

# MIDTERM EXAMINATION 2

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COMPUTER SCIENCE 61A

July 25, 2012

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## 0 A Question of Identity

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Fill in the table below:

Name and login of group member 1	
Name and login of group member 2	
Name and login of group member 3	
Name and login of group member 4	
Name and login of group member 5	
Section TA	

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FOR STAFF USE ONLY

Score:  /8

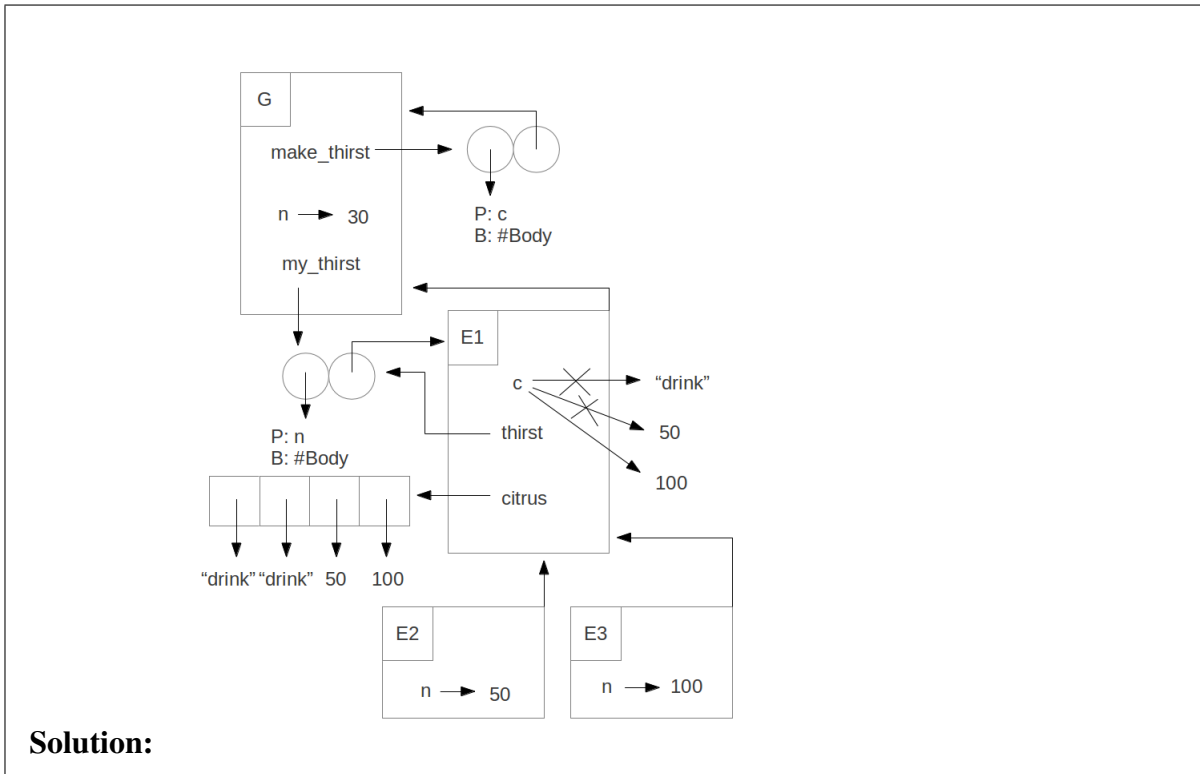
# 1 Group Portion: This Environment is Rather Dry (8 points)

(a) Suppose the following definition is typed into the Python interpreter.

```
def make_thirst(c):
    citrus = [c]
    def thirst(n):
        nonlocal c
        c = n
        citrus.append(c)
        return citrus
    citrus.append(c)
    return thirst
```

In the space below, draw the environment diagram that would result after the function `make_thirst` is defined and these three statements are then executed:

```
>>> n = 30
>>> my_thirst = make_thirst('drink')
>>> my_thirst(50)
```



- (b) **After all of the code in part (a) is executed**, what does the expression `my_thirst(100)` evaluate to? If evaluating the expression would cause an error, write “ERROR” and give the reason for the error. **Update the environment diagram above accordingly.**

**Solution:**

```
["drink", "drink", 50, 100]
```