Compsci 6, Fall 2011, Classwork 19

PRINT Names and NetID of students in group (min 2, max 3)

Name: _____   NetID: _____

Name: _____   NetID: _____

Name: _____   NetID: _____

Problem 1: First look at recursive stack

Consider the following Mystery function.

```
def Mystery(num):
   if num > 0:
       return 1 + Mystery(num/2)
   else:
       return 2 + num
```

What is Mystery(2)?

What is Mystery(4)?

What is Mystery(8)?

What is Mystery(17)?

Problem 2: Forward vs. backward recursion

Draw the stack and the result of PrintOnePerLineRec:

Draw the stack and the result when the two lines are swapped:

Problem 2: Multiple recursion

How would you use multiple recursion to print lines of "We all make Duke what it is?":

```
def PrintDuke(num):
```