

NAME: _____

CS21 Quiz 1, Swarthmore College, Fall 2015

1. For each of the following expressions, show the value that will be returned by the Python interpreter and give the type of the resulting value. Note: if the operation is not allowed in Python, write INVALID on that line.

	VALUE	TYPE
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<code>7 / 2</code>		
<code>range(2)</code>		
<code>range(2,10,2)</code>		
<code>"4" + 3 + "2" + "1"</code>		
<code>float(5/4)</code>		
<code>"Tricky"*3</code>		
<code>2 + 2.0</code>		

2. Show the output produced by the following program:

	OUTPUT

<pre>num = 0 lst = [0, 2, 1] for val in lst: num = 2*val print("%d %d" % (val, num)) print("done")</pre>	

3. Swarthmore's next blood drive is September 22th. A single donation can save up to three lives. Write a program that asks the user to enter the number of donors and prints the prints the maximum number of lives saved. A sample run is shown below. You do not need to include comments or function definitions in your solution.

```
$ python bloodDrive.py
Enter the number of Donors: 21

21 donors could save up to 63 lives!
```

4. Write a short program that prints a table showing the conversion between liters and gallons. One liter is 0.2641 gal. The minimum volume in the table should be 5 liters, and the maximum should be 50 liters. Print a row for every five liters in this range. Don't worry about aligning the table correctly, but your table should have a header at the top of the table with the column labels as shown below.

```
$ python volume.py
liters gallons
  5      1.3
 10      2.6
 15      4.0
 20      5.3
 25      6.6
 30      7.9
 35      9.2
 40     10.6
 45     11.9
 50     13.2
```