Problem Set 6, Problems 0, 1, and 2

Problem 0: Reading and response
Put your response to the reading below.

1. In light of the reading, make an argument for how computational models help and/or hurt society. You are welcome to stake out a middle position, or to take a strong stand on either side. Just make sure that your argument is informed by the reading.

   I think that in some ways, computer models are beneficial, but in other ways, they are not. I think computer models aren't always perfectly accurate, so when they are used directly for something important, errors made could be hazardous. For instance, in the banking risk predicting model, the errors causes a bank crisis. However, i think that when computer models are used where errors don't matter as much, they are beneficial. For instance, in the global warming model, some errors in the model didn't really matter, the overall picture was still the same.

2. Based on the information in the articles, how can computer scientists and others who develop computational models ensure that their models are correct? Is it even possible to do so?

I think that Computer scientists and others will never be able to get their models to one hundred percent correctly every time. I think that models can be made to be very accurate, but because of random factors, it is nearly impossible. With more time and more data, I think that the models will become more accurate though.

Problem 1: Tracing function calls

global variables

a	b	c
3	5	2
3	15	2

foo's local variables

a	b	c
2	3	5
6	3	5
6	3	15
19	3	15

bar's local variables

a	c	b
15	6	9
15	6	19

mystery's local variables

c	a
15	18
15	9
6	9
6	10

output (the lines printed by the program)

```
3 5 2
Foo 6 3 15
Bar 15 9 6
Foo 19 3 15
3 15 2
```

Problem 2: Understanding loops

2-1)

i	values[i]	values[i-1]	count
-	-	-	0
0	4	1	0
1	7	4	0
2	3	7	1
3	5	3	1
4	8	5	1
5	1	8	2

return value =

2-2)

a	b	value printed
8	3	8 3
5	2	7
3	1	4
2	0	2