Problem Set 6, Problems 0, 1, and 2

Problem 0: Reading and response

Put your response to the reading below.
IMPORTANT: Your entire response should fit on this page.

If one were to know every single component within the system being modeled, then a computational model's accuracy could be easily determined. However, in the real world, analyzing every single detail in a system is impossible. Hence, assumptions have to be made so as to not spend an eternity building these models. In the case of the financial article, assumptions about human behaviour were made since it would be beyond impossible for us to go into every single person's brain and analyze each component and chemical and see their interactions. Similarly, in the global warming article, you can't measure every single living or unliving component in the Earth, so you make assumptions about some of them to construct your computational model.

Problem 1: Tracing function calls

IMPORTANT: This heading should appear at the very top of the second page.

global variables

a	b	c
2	3	8
2	6	8

foo's local variables

a	b	c
8	2	3
12	2	3
12	2	6

bar's local variables

a	c	b
6	12	
6	12	10
6	12	17

mystery's local variables

c	a
6	9
6	10
12	15
12	7

output (the lines printed by the program)

```
2 3 8
foo 12 2 6
bar 6 10 12
foo 17 2 6
2 6 8
```

Problem 2: Understanding loops

IMPORTANT: This heading should appear at the very top of the third page.

2-1)

i	values[i]	values[i-1]	count
-	-	-	0
0	8	6	1
1	5	8	1
2	3	5	1
3	7	3	2
4	1	7	1
5	6	1	3

`return value = 3`

2-2)

a	b	value printed
12	4	12 4
8	3	5
5	2	3
3	1	2
2	0	2