

## Problem Set 5, Problems 6 and 7

### Problem 6: Practicing function calls and variable scope

global variables

| a | b  | c |
|---|----|---|
| 3 | 5  | 2 |
| 3 | 15 | 2 |
|   |    |   |
|   |    |   |

foo's local variables

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

bar's local variables

| a  | c | b  |
|----|---|----|
| 15 | a |    |
| 15 | 6 | 9  |
| 15 | 6 | 19 |
|    |   |    |

mystery's local variables

| c  | a  |
|----|----|
| 15 | 18 |
| 15 | 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 7: Understanding loops

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

7-1)

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

return value = 2

7-2)

| a | b | value printed |
|---|---|---------------|
| 8 | 3 | 8 3           |
| 5 | 2 | 3             |
| 3 | 1 | 2             |
| 2 | 0 | 2             |
|   |   |               |
|   |   |               |