

## CSCI 2330 – Movement and Addressing Exercises

1. Assuming the following memory contents and register values, compute the values indicated below.

| Memory Address | Value |
|----------------|-------|
| 0x100          | 0xFF  |
| 0x104          | 0xAB  |
| 0x108          | 0x13  |
| 0x10C          | 0x11  |

| Register | Value |
|----------|-------|
| %rax     | 0x100 |
| %rcx     | 0x1   |
| %rdx     | 0x3   |

| Operand        | Value |
|----------------|-------|
| %rax           |       |
| 0x104          |       |
| \$0x108        |       |
| (%rax)         |       |
| 4(%rax)        |       |
| 9(%rax,%rdx)   |       |
| 260(%rcx,%rdx) |       |
| 0xFC(,%rcx,4)  |       |
| (%rax,%rdx,4)  |       |

2. What's **wrong** with each of the following assembly commands?

- movb \$0xF, (%ebx)
- movl %rax, (%rsp)
- movw (%rax), 4(%rsp)
- movq %rax, \$0x123
- movl %eax, %rdx