

CSCI 2330 – x86-64 Movement and Addressing Exercises

1. Assuming the following memory contents and register values, compute the values given by the x86-64 operands in the table below. Assume a 4-byte operand size in all cases.

Memory	0xFF	0xAB	0x13	0x11	
	0x100	0x104	0x108	0x10C	0x110
Registers	0x100	0x1	0x3		
	%rax	%rcx	%rdx		
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 movement commands?

a. movq %eax, %rdx

b. movl \$0xF, (%ebx)

c. movl %rax, (%rsp)

d. movq %rax, \$0x123

e. movw (%rax), 4(%rsp)