# CSPB 2400 - Park - Computer Systems

<u>Dashboard</u> / My courses / <u>2241:CSPB 2400</u> / <u>29 January - 4 February</u> / <u>Reading quiz CS:APP 3.5</u>

Started on Saturday, 3 February 2024, 7:18 PM

State Finished

Completed on Saturday, 3 February 2024, 7:24 PM

Time taken 6 mins 39 secs

Marks 22.00/22.00

Question 1

Correct

Mark 1.00 out of 1.00

Grade

Determine the appropriate instruction suffix based on the operands.

10.00 out of 10.00 (100%)





Your answer is correct.

Because this refers to 32-bit register values (e.g. %edx), you would use movl.

Correct

Mark 1.00 out of 1.00

Determine the appropriate instruction suffix based on the operands.





Your answer is correct.

Because this refers to 32-bit register values (e.g. %edi), you would use movl.

## Question 3

Correct

Mark 1.00 out of 1.00

Determine the appropriate instruction suffix based on the operands.





Your answer is correct.

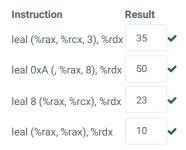
Because the register specified is a 32-bit register, you would use a 32-bit operator ( popl )

#### Question 4

Correct

Mark 4.00 out of 4.00

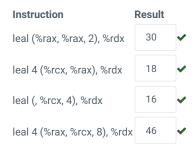
Suppose register %rax holds value 5 and %rcx holds value 10. Fill in the table below with formulas indicating the value that will be stored in register %rdx for each of the given assembly code instructions: (Answer in decimal)



Correct

Mark 4.00 out of 4.00

Suppose register %rax holds value 10 and %rcx holds value 4. Fill in the table below with formulas indicating the value that will be stored in register %rdx for each of the given assembly code instructions: (Answer in decimal)



## Question 6

Correct

Mark 1.00 out of 1.00

What does this command mean? addl 16(%ebp),%ecx

## Select one:

- a. Mem[Reg[ebp]] = Reg[ecx] + Mem[Reg[ebp] + 16]
- b. Reg[ecx] = Reg[ecx] + Mem[Reg[ebp]] + 16
- c. Reg[ecx] = 16 + Mem[Reg[ebp]]
- d. Reg[ecx] = Reg[ecx] + Mem[Reg[ebp] + 16]

Your answer is correct.

Correct

Mark 1.00 out of 1.00

The notation M[x] refers to the value of memory at address x, and Reg[x] refers to the value of register x. What does this instruction mean? addq \$0x11 , (%rax) Select one: a. Mem[Reg[rax]] = 17 + Reg[rax] b. Reg[rax] = 11 + Reg[rax]c. Mem[Reg[rax]] = 17 + Mem[Reg[rax]] d. Reg[rax] = 11 + Mem[Reg[rax]] Your answer is correct. Question 8 Correct Mark 1.00 out of 1.00 What does this command mean? subl \$0x11, (%eax) Select one: a. Mem[Reg[eax]] = Mem[Reg[eax]] - 17 b. Reg[eax] = Reg[eax] - 11

c. Mem[Reg[eax]] = Reg[eax] - 17

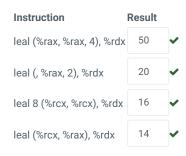
d. Reg[eax] = 11 - Mem[Reg[eax]]

Your answer is correct.

Correct

Mark 4.00 out of 4.00

Suppose register %rax holds value 10 and %rcx holds value 4. Fill in the table below with the value that will be stored in register %rdx for each of the given assembly code instructions: (Answer in decimal)



## Question 10

Correct

Mark 4.00 out of 4.00

Suppose register %rax holds value 10 and %rcx holds value 4. Fill in the table below with formulas indicating the value that will be stored in register %rdx for each of the given assembly code instructions: (Answer in decimal)

