Discovery Series #07: Basic x86-64 instructions

Started: Sep 26 at 5:22pm

Quiz Instructions

Reminding you of the academic honor pledge that you signed.

Strongly recommend that your SASM is working before you proceed with the discovery series

This discovery series is to familiarize you with the basic x86-64 instruction sets (MOV, ADD, INC, LEA, NOP)

Please note the following instructions:

1.) Choose the best answer if the question is multiple choice.

2.) For fill in the blank:

(a) DO NOT include radix prefix (i.e., 0x12CA is incorrect) or radix suffix (i.e. 12CAh is incorrect).

(b) NO space between digits (i.e., 1101 0100 is incorrect).

(c) Hex digit in CAPITAL letter (i.e., 12ca is incorrect).

(d) If positive, DO NOT place the (+) sign (i.e., +12 is incorrect).

(e) The answer should match the data size of the requested output.

(f) True means "Valid syntax"; False means "Invalid syntax (error/warning)."

Example:

MOV AX, 0x12

What is the content of register AX after execution?

Answer: 0001

⋮⋮

Question 1 1 pts

INC BETA

○ True

● False

Question 2 1 pts

INC RSI, 2

○ True

◉ False

Question 3 1 pts

INC AL

◉ True

○ False

Question 4 1 pts

LEA [BETA], ESI

○ True

◉ False

Question 5 1 pts

LEA RDX, [RDX]

○ True

◉ False

Question 6 1 pts

LEA [ESI], [BETA]

◉ True

○ False

Question 7 1 pts

LEA AL, [BETA]

○ True

● False

⋮⋮

Question 8 1 pts

Label	Address	Data
	10000007	12
	10000006	34
	10000005	56
	10000004	78
	10000003	FF
	10000002	FF
	10000001	FF
ALPHA:	10000000	FF

INC byte [ALPHA]

MOV EAX, [ALPHA]

What will EAX contain after execution?

| 00 |

⋮⋮

Question 9 1 pts

Label	Address	Data
	10000007	12
	10000006	34
	10000005	56
	10000004	78
	10000003	FF
	10000002	FF
	10000001	FF

ALPHA:	10000000	FF

LEA EAX, [ALPHA]

INC byte [EAX]

MOV ESI, [EAX]

What will ESI contain after execution?

```
00
```

⋮⋮

Question 10 1 pts

Label	Address	Data
	10000007	12
	10000006	34
	10000005	56
	10000004	78
	10000003	FF
	10000002	FF
	10000001	FF
ALPHA:	10000000	FF

LEA EAX, [ALPHA]

INC EAX

What will EAX contain after execution?

```
10000001
```

Quiz saved at 5:29pm Submit Quiz