EE 4953 Intro to x86_64 ASM - Summer 2024
Exam 1

Name: _____   Score: _____/50

Total 2 pages + nasm file

1. Byte Ordering. x86_64 is little endian. How would `0xDEADC0DE` be represented when looking at it in memory?

   - `0xefbeadde`
   - `0xcodedead`
   - `0xfeebdaed`
   - `0xdecoadde`

2. **RAX** contains the address **0xc0ffee.** How do you copy the data it's pointing to into **RCX**?

   - `mov rcx, [rax]`
   - `mov rcx, rax`
   - `mov [rcx], rax`
   - `mov [rcx], [rax]`

3. What value is in **RAX**, after the following assembly code?

```
mov rax, 1
mov rcx, 2

push rax
push rcx

pop rcx
pop rax
```

   - 1
   - 2

4. The following pieces of x86 asm would return the same result?

```
mov rax, 1
mov rcx, 2

add rax, rcx

ret
```

```
mov rax, 1
mov rcx, 2

add rcx, rax

ret
```

- True
- False

5. What issues can occur when using the div instruction?