## Unit 08_010 – Declaring multiples

1. What is an address?


2. In the listing we see text like the following. If we execute the program, will char3 be loaded at location 0003 in physical memory? Explain.

```
0003 43                 char3: .byte 67  # same as 0x43
```


3. We have been using the term "variable" this semester. How are they similar to the idea of a variable in a high level language? How are they different? (I did not cover this explicitly in the video. Think about it.)


4. What does $ mean when it appears before a label?


5. What does it mean when a register appears in (parenthesis)?


6. How are the $ and () compliments of each other?


7. Explain the difference between the following two lines of code. What would be loaded into the register in each? Also, why doesn't (%rdx) change?

```
movb (%rbx), %dil
movq (%rbx), %rdi
```

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If you have any lingering questions or problems, please write them here or see me.