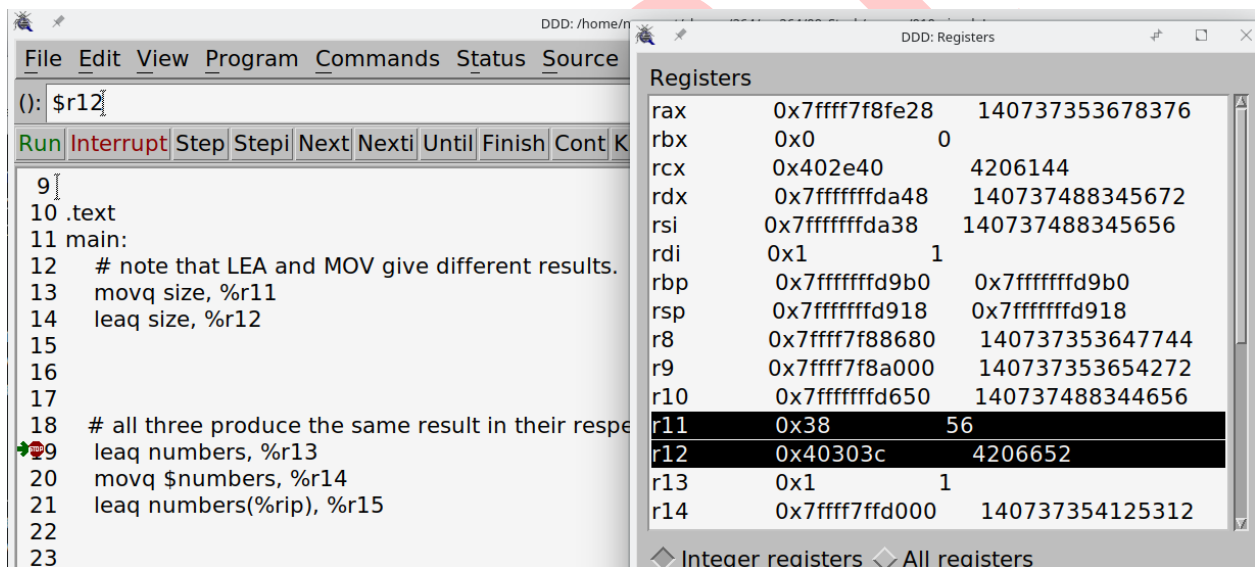# Unit 09_010 – LEA (Part 1)

1. What does LEA stand for?

2. How does the SYNTAX of the LEA instruction compare to the SYNTAX of the MOV instruction?

3. How does the MEANING of the LEA instruction compare to the MEANING of the MOV instruction?

4. The following image is from the ddd debugger. It shows the memory contents after lines 13 and 14 of the code were executed. Why are the contents of r11 and r12 different?

Unit 09_010 – LEA (Part 2)

Video Length

5. Explain why using the "$" in the statement `movq $size, %r11` reduces the need for the `lea` instruction.

6. In the GAS assember in 64-bit mode, which of the following statements is different than the others in their results? Explain your answer.

   - texttttmovq size, %r11
   - texttttmovq $size, %r11
   - texttttleaq size, %r11

7. In the GAS assember in 64-bit mode, which of the following statements is different than the others in their results? Explain your answer.

   - texttttmovq size, %r11
   - texttttmovq $size, %r11
   - texttttmovq size(%rip), %r11

   _____

   _____

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

CSC 264
```
MOV AX,BX
ADD AX,1
CALL FUNC
```
Assembly Language and Computer Architecture