ASM1 Report

first part:

variable used: delta $s3

1st item->
address stored in register: 0x10010044

2nd item->
1st instruction for $s3 register (lui): lei $1, 0x00001001
2nd instruction (ori): ori $19, $1, 0x00000044

3rd item->
1st instruction 32-bit hex encoding: 0x3c011001
2nd instruction 32-bit hex encoding: 0x34330044

second part:

string: textSort: first four: “Sort

hex codes:
S: 53
o: 6F
r: 72
t: 74

address of string in memory: 0x10010000

word in memory containing ascii codes: Value (+0) : 0x74726F53

Well, for one I learned to use breakpoints which is so helpful in accessing what happens throughout the code and debugging really. Also differentiating between addresses and hex codes.

questions that arose:

1. Why are the lines of code not in order in the execute section?

2. what are the “Value (+x)” in the Data Segment?

I had to use breakpoints a lot, I kept undoing and running one step at a time which, like the professor mentioned before, is very helpful.

I also had to keep an eye on the right bar which shows you the registers and how data shifts inside them.

I think they are stored in words of multiples of 4. Like I saw in the Data Segment.