Lab Report

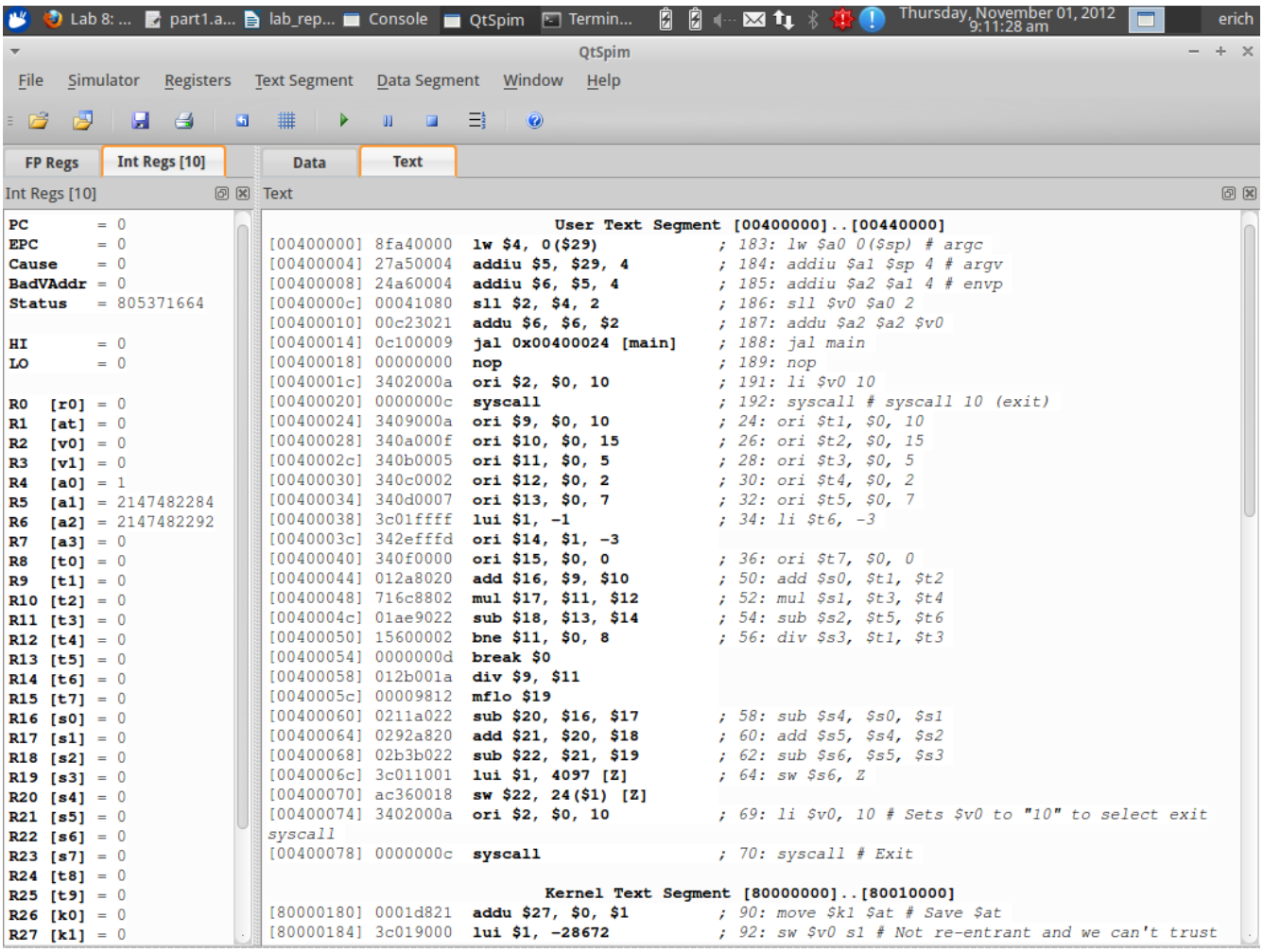
ECPE 170 – Computer Systems and Networks – Fall 2012

Name: Erich Viebrock

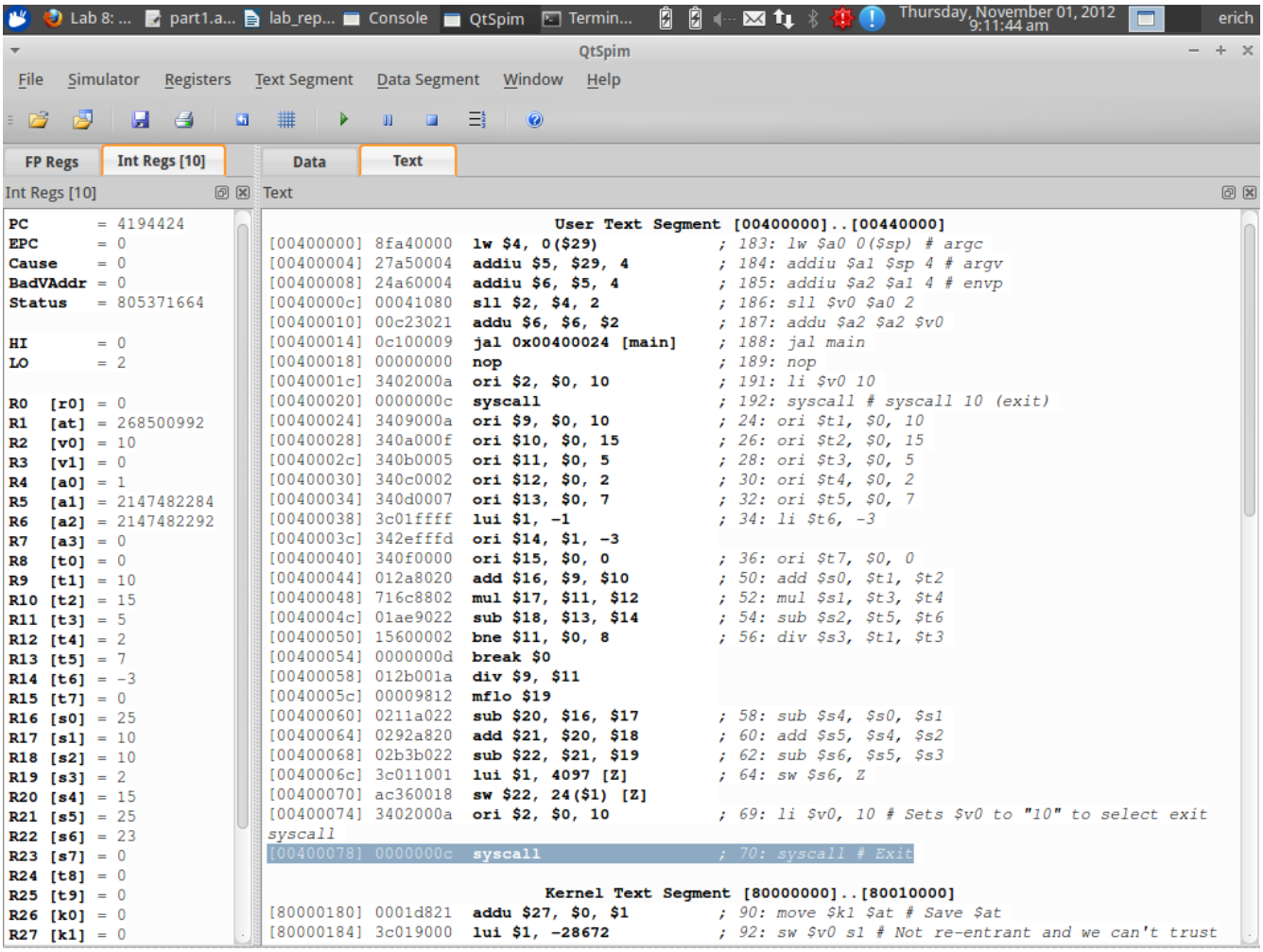
Lab Topic: MIPS Assembly Programming (Basic) (Lab #: 8)

Lab

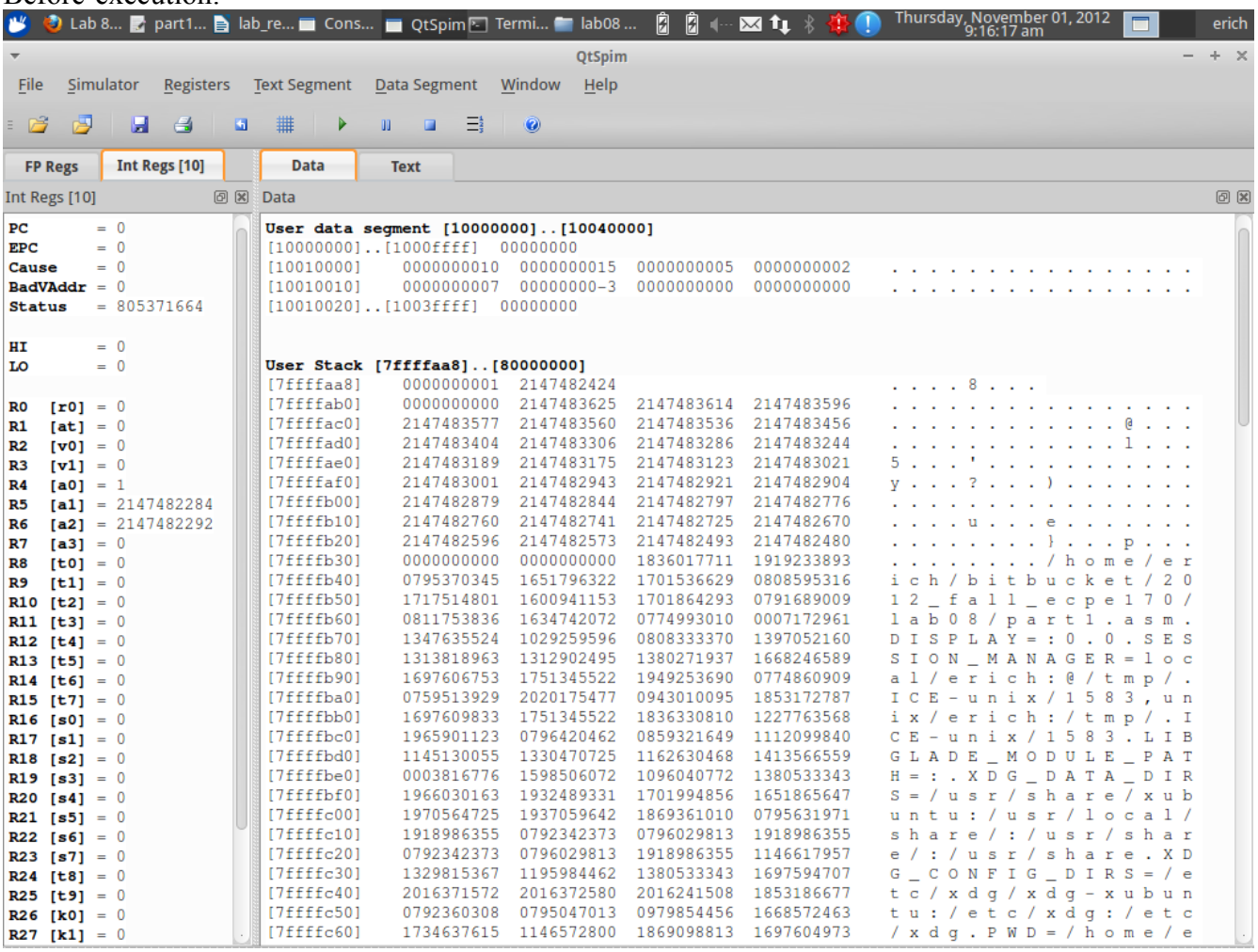
Question #1:
Take two screenshots of the MIPS register panel: before your program runs, and after your program finishes. Put the register panel in Decimal mode (right-click) so it is easy to see register values.
Answer:
Before-execution:



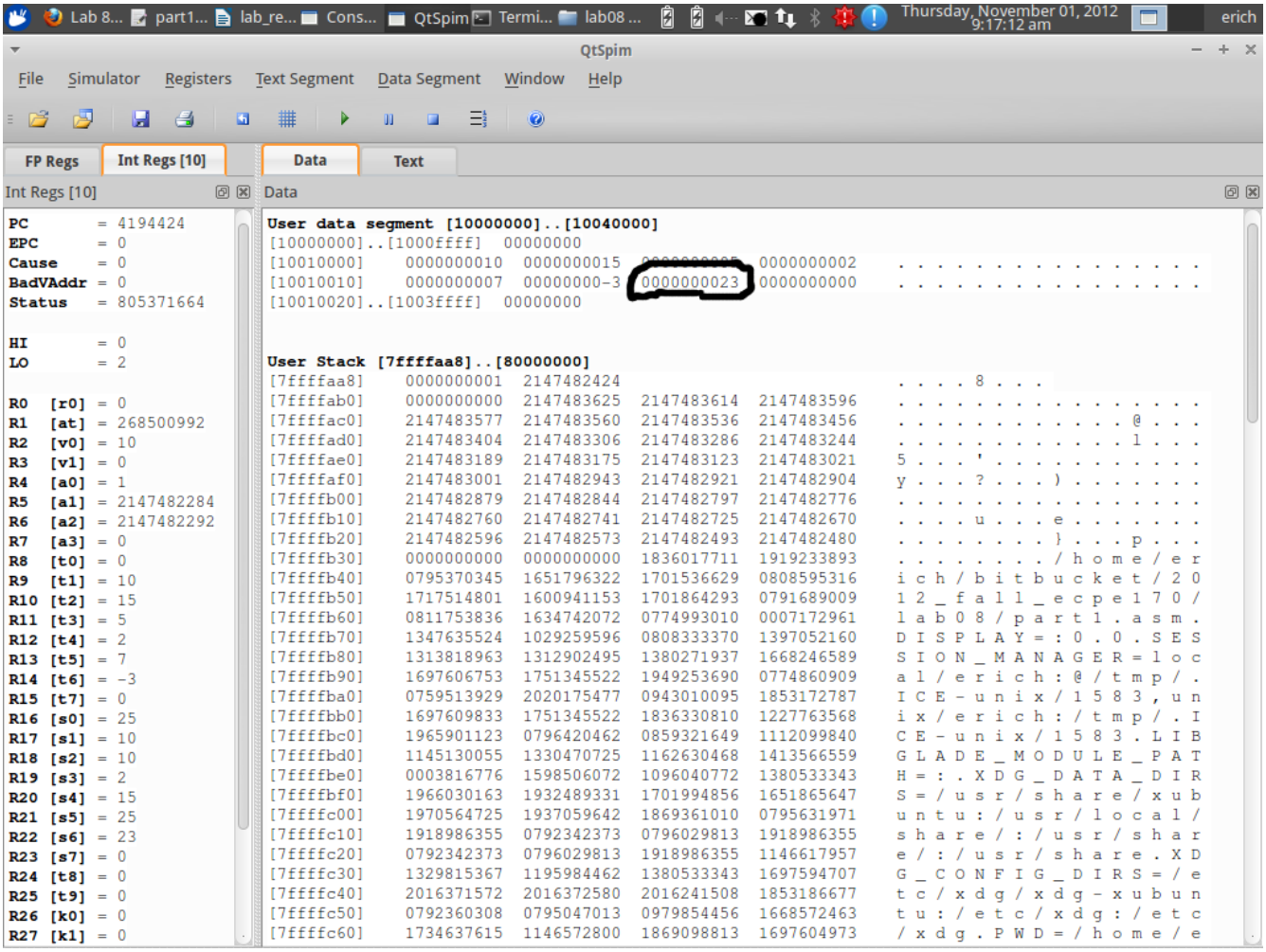
After-execution:



Question #2:
Take two screenshots of the MIPS memory panel (data tab): before your program runs, and after your program finishes. Put the memory panel is Decimal mode (right-click), so it is easy to see memory values. In the after-execution capture, **circle the memory element that contains the final calculated value of Z**.
Answer:
Before-execution:



After-execution:

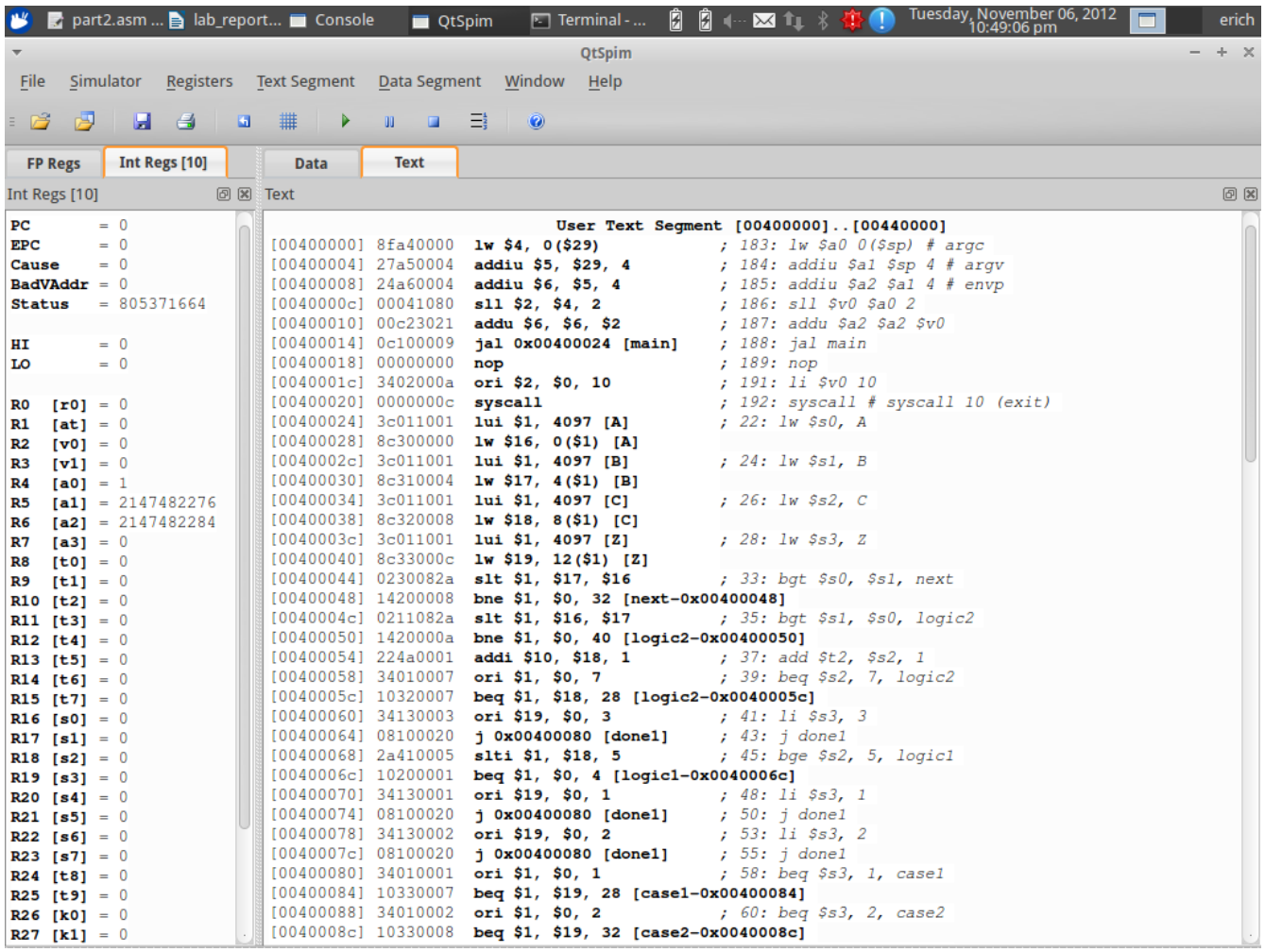


Question #3:

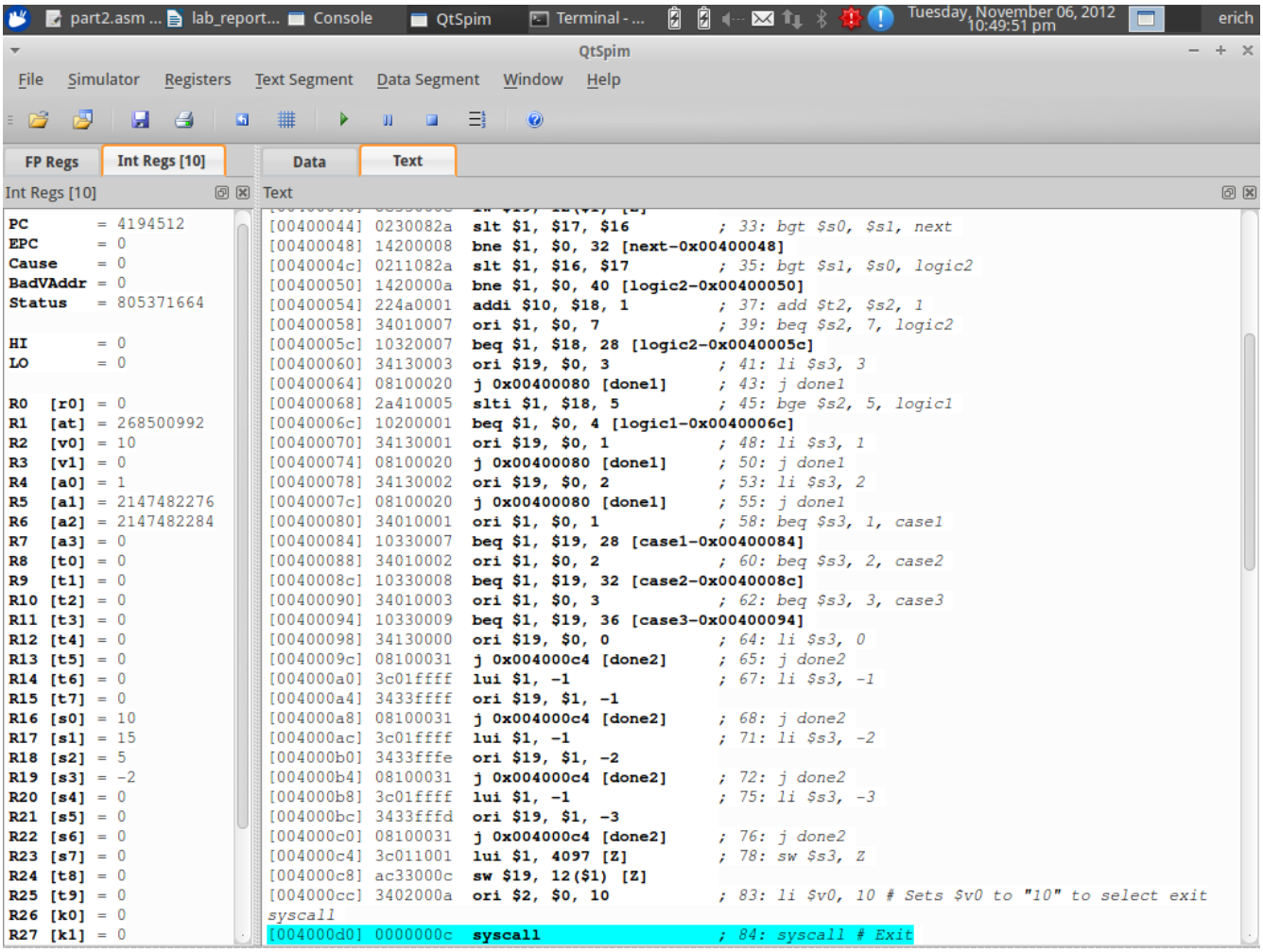
Take two screenshots of the MIPS register panel: before your program runs, and after your program finishes. Put the register panel in Decimal mode (right-click) so it is easy to see register values.

Answer:

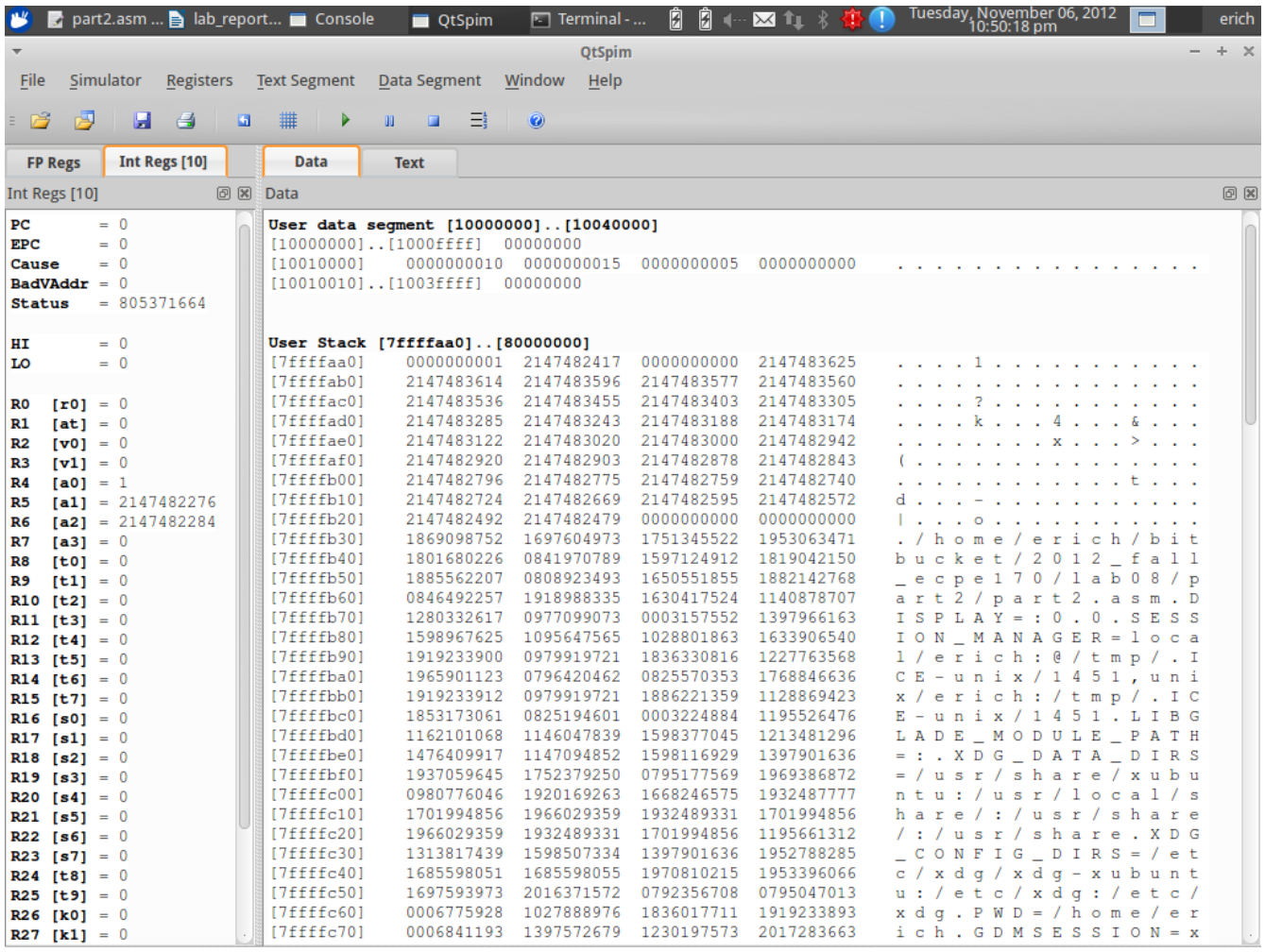
Before-execution:



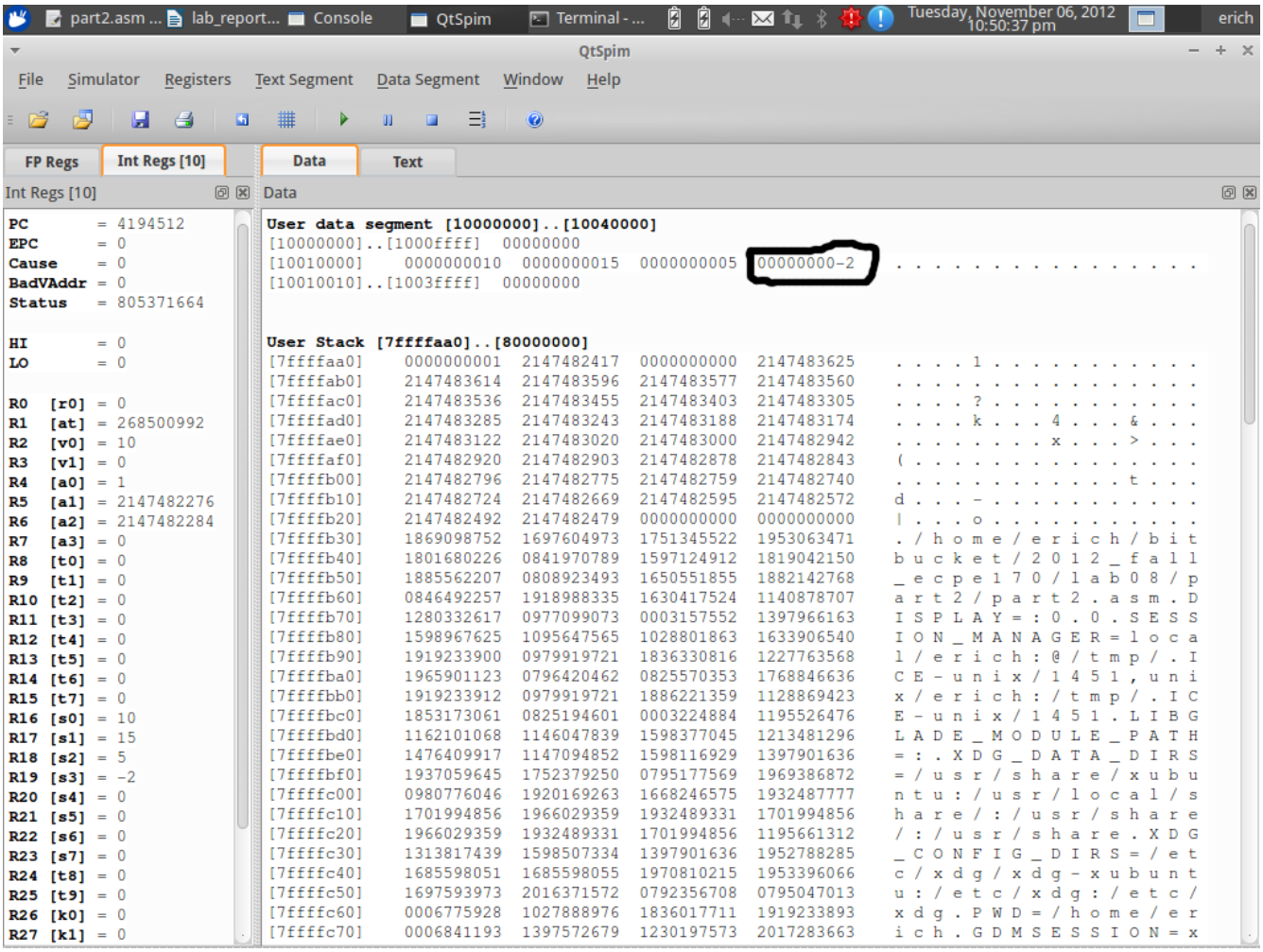
After-execution:



Question #4:
Take two screenshots of the MIPS memory panel (data tab): before your program runs, and after your program finishes. Put the memory panel is Decimal mode (right-click), so it is easy to see memory values. In the after-execution capture, **circle the memory element that contains the final calculated value of Z**.
Answer:
Before-execution:



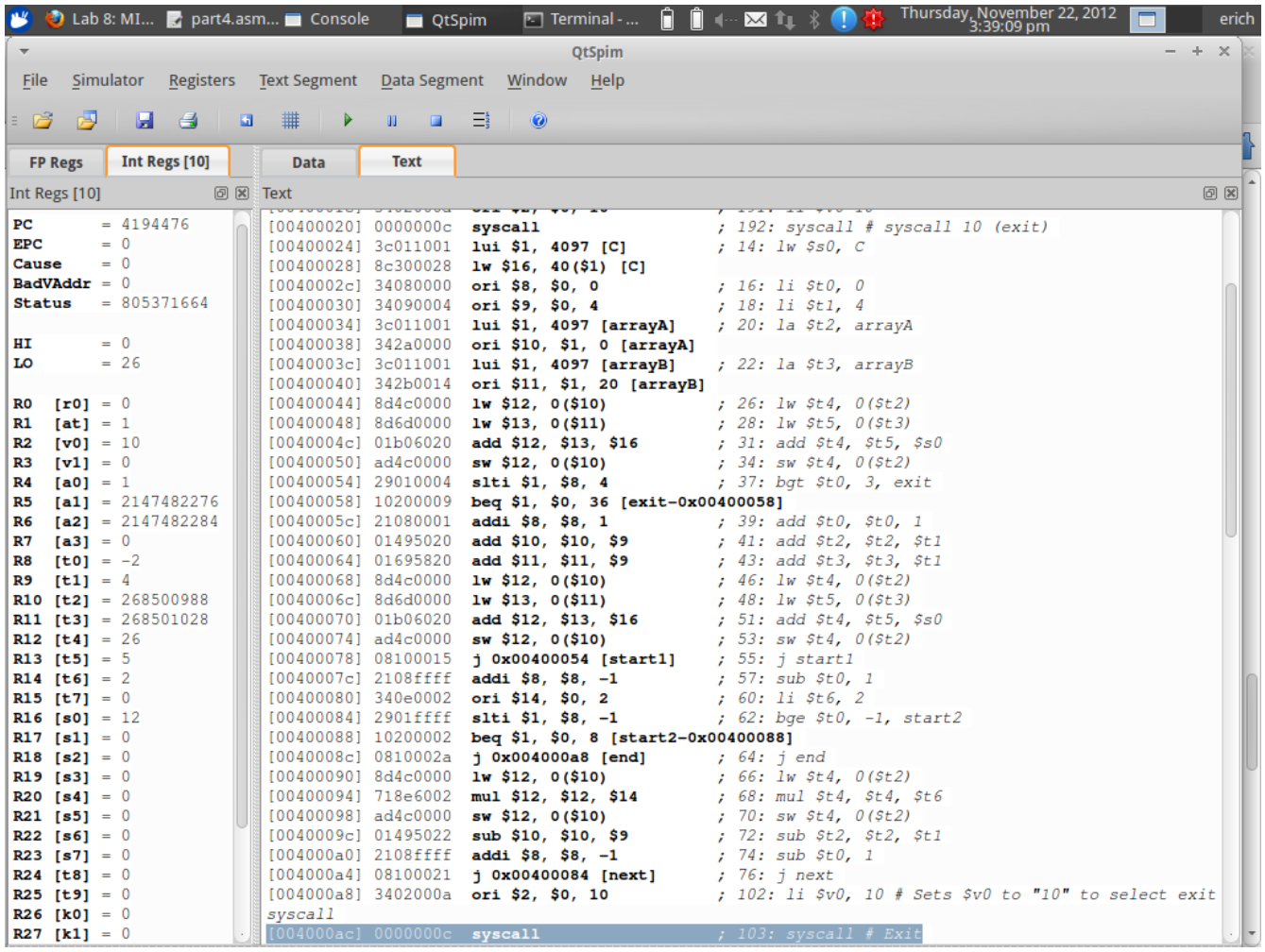
After-execution:



Question #5:

Take a screenshot of the MIPS register panel after your program finishes. Put the register panel in Decimal mode (right-click) so it is easy to see register values.

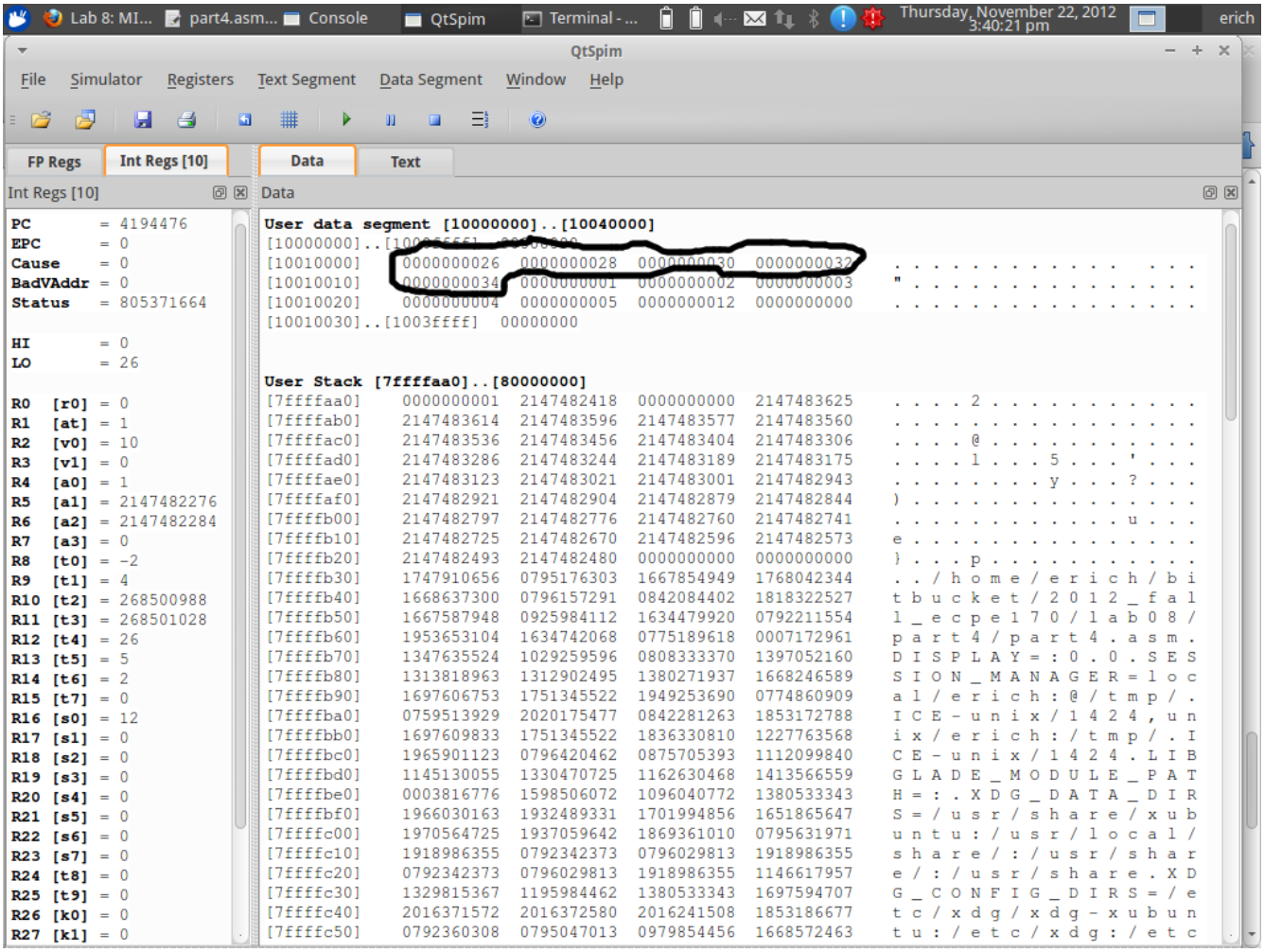
Answer:



Question #6:

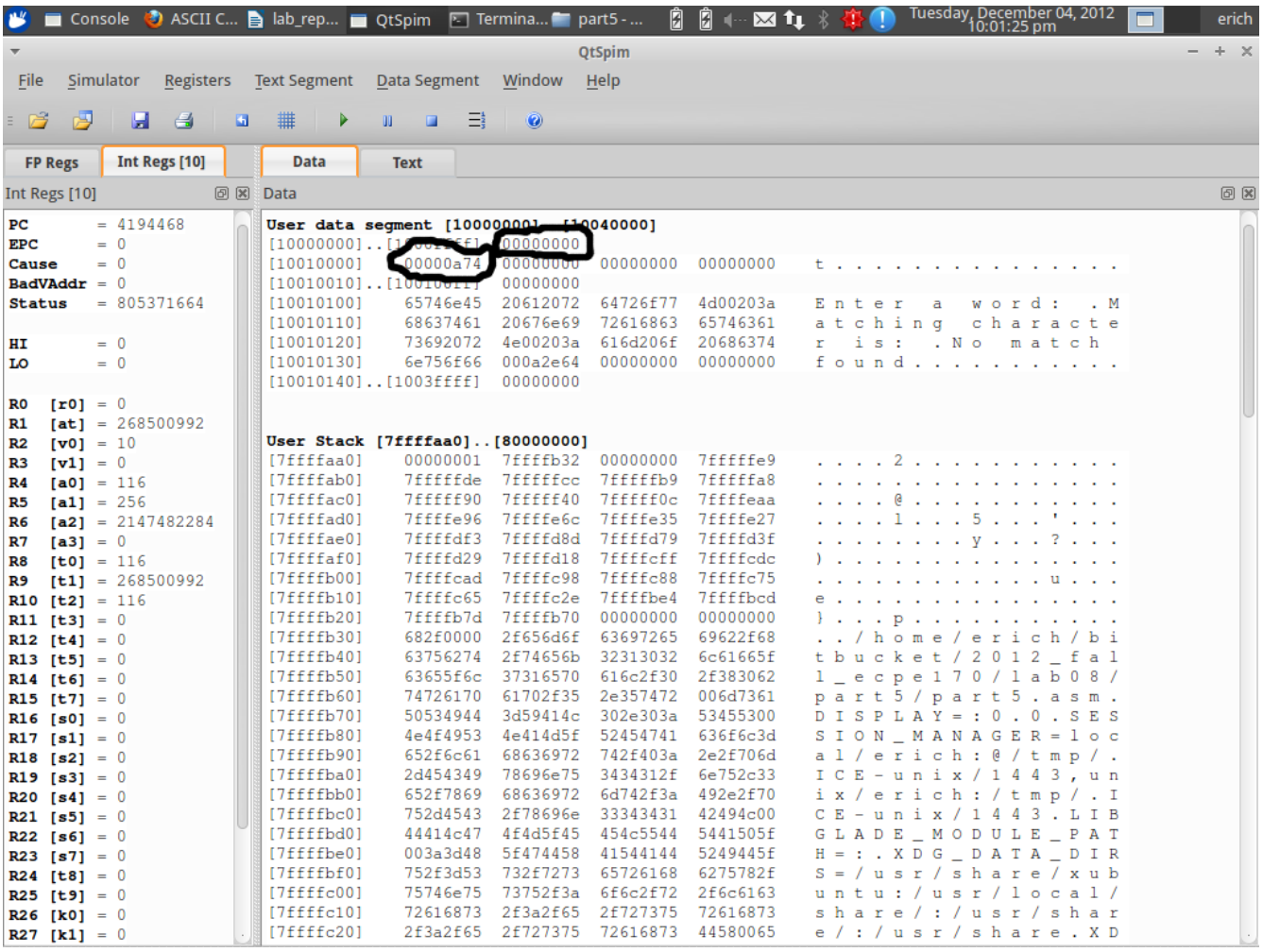
Take a screenshot of the MIPS memory panel (data tab) after your program finishes. Put the memory panel is Decimal mode (right-click), so it is easy to see memory values. **Circle the final values of array A.**

Answer:



Question #7:
Take a screenshot of the MIPS memory panel (data tab) after your program finishes. Put the memory panel is Hex mode (right-click), since Decimal mode will not allow us to distinguish between bytes. **Circle two things: the final value of the pointer 'result' in memory, and the corresponding location that result points to.** Does that location in memory contain the ASCII code for the character 't'? *(If not, you had better check your work!)*

Answer:



Post-Lab

Question #1:
What was the best aspect of this lab?
Answer:
Practicing an assembly language gives the programmer a closer look at how programs work behind the scenes.

Question #2:
What was the worst aspect of this lab?
Answer:
The appendixes were difficult to decipher from. Went online to find most of the help.

Question #3:
How would you suggest improving this lab in future semesters?
Answer:
More example programs similar to the assembly code asked for.