Lab 2: Data in Memory

Due date: By the end of Thursday, 9/12/2019.

This Lab is worth a maximum of 10 points.

Objectives

The goal of this lab is to understand data stored in memory. The address and the value of a data can be represented in hexadecimal, decimal, or other formats.

Read the lab assignment and skeleton code carefully before starting to work on it.

Tasks

Complete the following tasks. You will need to find the proper syscalls in MARS's help pages to print numbers in different formats. Also, make sure the memory configuration is set to default (Settings/Memory Configuration …).

1. Name. The code provided in lab2.s prints a string that has the course number, lab, and name information. However, the name is not correct. Replace YOURNAME with your real name in the string.
2. Copy first two words in warry to buf. You can use MIPS instructions and the pseudo instruction `la`.
3. Print warray[2] as a signed integer and an unsigned integer. Remember to print a newline after each number.
4. Load the word located at location name and print the word in hexadecimal. Remember to print a newline after the number.
5. Answer the questions at the end of the skeleton file. Make sure your answers are in comments. Note that you can display the addresses and values in memory or values in register in either hexadecimal or decimal.

The program outputs the following numbers for Tasks 3 and 4.

```
-975161754

3319805542

0x33455343
```

Deliverables

Submit revised lab2.s, with your code, answers, and comments, in HuskyCT.

To receive full credits, your code should use MIPS instructions/pseudo instructions properly.