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Lab 4 Report

Computer Organization

For lab 4 I again used the macros I have been implementing since lab1.

A screenshot of a computer program

Description automatically generated

Beneath the macros I then defined the data variables I would use for program. I only needed one word type variable that would hold the integer that is input by the user.

Next, in the main program section I first loaded three integers into $t0, $t1, and $s0. $s0 was set to zero just to be used to compare against the users input so the program quits when zero is entered. $t0 is where the user’s input is stored after being read into $v0, so it is overwritten each time input is read in. And $t1 is where the sum of each added input is put into.

A screenshot of a computer program

Description automatically generated

In the main loop it first checks if $t0 is equal to $s0. That is why $t0 is initially set to 1 in the beginning, to avoid the statement being true right away. Next it just loops through asking for an integer from the user and adds them together and stores it in $t1. Once zero is entered, the program jumps to the end label and exits the program.

Overall, I did not run into any issues writing this programming since it was just basic looping and adding of integers.