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Lab 4.2 Report

Computer Organization

For lab 4.2 I again used the macros I have been implementing since lab1.

A screenshot of a computer program

Description automatically generated

For the data section, I made three, word data types to store the three different integers that the user will input. The next set of data are three different strings that are used in the program.

A screenshot of a computer program

Description automatically generated

For the main section I first prompt the user to input three integers and store them in $t0, $t1, and $t2 respectively. Next is where the program starts it’s branching sections. I first check if a is less than b, if it is it jumps to a label where it first checks if c is greater than a. If that were the case, you would add b and c. If c is not greater than a, you would add a and b together. Going back to the beginning of the branching section if a is not less than it jumps to a label to check if b is greater than c. If that were the case you would add a and c together. The program then jumps to the end label and exits.

Overall I did not run into any issues writing this program but looking back the branching statements could be better optimized.