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CENG320 Lab 3 Report

This lab consisted of copying down skeleton code which would add a 32-bit integer and a 64-bit integer, and return the result to the screen using printf. I then expanded the code so that the user could input two 32-bit integers, and then receive the sum before inputting two 64-bit integers and receiving their sum. In order to allow the second 32- and 64-bit integers to be stored alongside the first ones, I declared two more variables which they could be stored in.

I adjusted the addition section to take in and add two 32-bit integers first, and then after that was done reused the memory since the result of the 32-bit integers was already printed to the console. After that, I set up the program to read in two 64-bit integers from the console. I ran into a small error with trying to use w memory instead of x, resulting in a segmentation fault. This was an easy fix, though. Once that was figured out, the program was able to successfully add together both of the 64-bit integers and return from the function main.

This lab taught me much more about assembly in terms of learning what the syntax which I have seen actually does. Understanding the code enough to know what was happening at each point so that I could expand it really helped me solidify in my mind some of the methods which we have been learning in class. Overall, lots of questions which I had about syntax and what each piece of code does were answered.