Assembly Programming Reflection

A Reflection of the Assembly Programs written for Computer Architecture

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For this assignment, I was to develop several programs to perform arbitrary tasks using assembly. This assignment while it may seem somewhat trivial, was actually very beneficial to my understanding of computer science.

To understand how to write efficient software, understanding the system level of a program is essential. With that, having an understanding of assembly programming displays how the system level works and how programs run "under the hood." In addition, knowing assembly gives the programmer an understanding of the mechanics occurring within the hardware.

Prior to this assignment, I had little understanding of assembly programming. This assignment taught me not only how to program using assembly, but it also showed how inefficient some programming techniques can be (such as writing conditionals.) Knowing assembly now enables me to think twice and design better software. By showing what is going on beneath the surface, I know feel like I know how to make design decisions to enhance program performance.

Given all of this, this assignment demonstrates the Computer Science Department's Program Goals of understanding concepts and techniques of software design as well as attaining a system level understanding of the computer.