Lab 5 Report

Zachary Hayes (zhaye769)

Ryan Longacre (rlong315)

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## Overview

In this lab, we had our first experience with conditionals and control flow in Assembly. We write a while loop and a short if/else network using equality checks and greater/less than comparisons. Also, for extra credit, we learn how to include and use another external function besides printf and scanf – rand\_s.

## Obstacles

* Implementing rand\_s was slightly tricky. Passing a pointer as an argument instead of a value was different (though not new – this is how scanf works), and having to use modulus on that number was not straightforward. This caused no serious issues, though.
* Incrementing the number of guesses variable by using the inc command took several failed assembles, because of a forgotten pointer to the value behind the variable.

## Results

We successfully completed all of the lab instructions, including the minor and major bonus objectives.

Since this was one of our first serious trips into Assembly, we learned quite a bit about its syntax and semantics from this lab. Specifically, we learned about using cmp and various jump statements (conditional and unconditional) to implement a while loop and if/else statements. As mentioned earlier, we also learned how to include and use the rand\_s function.