

Dylan Aegbuniwe

CSC 472

Lab 1: Stack and Stack Frame

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Introduction

In this lab, we are using the gdb debugger to learn information about stacks and stack frames in assembly code.

Analysis and Results

1. The first two lines, 0x0804919f and 0x080491a0.
2. 5 and 6 are being moved into these variable slots.
3. The integers 5 and 6 are being stored in other locations before being moved into the variable spots.
4. A new stack frame is being created where first a pointer to data on the stack is being pushed, followed by the stack pointer being moved to the pointer to data on the stack.
5. eax is being used to store the final summation result.

Discussion and Conclusion

This lab satisfied the purpose of helping learn how to use the gdb debugger to analyze and learn how stacks and stack frames are used in assembly code. I've learned more now about how variables are stored in assembly code and how stack frames are setup in the code, along with how they are constructed.