

Project Writeup: Fibonacci

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1 Project Summary

The Fibonacci project is an x86 Assembly Program written using Intel syntax. The purpose of the program is receive a positive integer ' n ' as input and print the n^{th} Fibonacci number in hexadecimal and octal.

2 Challenges

Figuring out how to pass the least significant bits for the octal output provided an interesting challenge, especially with regular print function calls.

Verifying the $F(n)$ output was correct took longer than expected. The time required to notice logical errors for the large Fibonacci numbers in particular.

3 Successes

Organizing the functions/labels to chain together was straightforward.

My partner is a genius.

4 Lessons Learned

Converting from a clean 64 bits to octal requires either bit shifting or linking the registers together.

Coding in assembly is much more straightforward with marking out what registers get changed by certain function calls.