Fibonacci

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Project Summary

The task is to write a program in x86 assembly language that uses the first command-line parameter as a number N from 0 through 100. The program should print out F(N), in hexadecimal.

Features Targeted

Design Plan, Test Plan, and Write up using LaTeX

Write the write up, test plan, and design plan using TeX or LaTeX language (be sure to include the source files).

Man page

Write a `man(1)` page to document the program.

Octal output

Add a command-line option `-o` for octal output.

Decimal output

add a command-line option `-d` for decimal output up to f(100)/f(300)

Architecture

The code consists of three main parts, processing of options, calculation of number, and printing of the number.

User Interface

Uses the CLI. The user can enter options that affect the behavior of the program. The user must enter a mandatory command during program invocation.

Approach

1. Review Fibonacci sequence
2. Sketch out command line input portion
3. Sketch out Fibonacci calculation portion
4. Sketch out printing portion
5. Implement options for extra features
6. Review code for extra features
7. Implement translation between binary to octal/decimal
8. Review completed code with group
9. Implement discussed changes
10. Create post-project write-ups