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CS 211: Computer Architecture

Assignment 3: Assembly Language Programming

## Description:

The mystery program finds the 'nth' term in the fibonacci sequence. I was able to figure out what it does by inputting several different values after compiling the assembly and realizing the pattern. The real challenge was figuring out how mystery.s actually found the 'nth' fibonacci term out.

## Optimized/Unoptimized Comparison:

The optimized assembly of my msytery.c does not create another stack frame for the function "dothething." Additionally, it uses addl as opposed to using the add function, while also using leal in some cases instead of movl and testl instead of cmpl when comparing %eax to 0. Both of the former instructions are slightly more efficient than their unoptimized counterparts.