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PA3 Mystery ReadME

To figure out what the mystery program does, you have to compile it and read the assembly code. By figuring out what arithmetic function is being done, you can conclude that it's the fibonacci sequence. In the original code, you can tell that num is an array because they move values into with with `num(,%eax,4)`, this is also the same as `num[<value in eax]`. This means that solved values are stored in the array, so there's no need for recalculation. This type of optimization is memoization. When the compiler optimizes the C code, there are a few subtle but important changes. This time, it removes unnecessary data movement. Also, when possible, it uses LEA instead of MOV to reduce instructions and simplify comparisons; which will make the program run faster.