

Exploration #2

Due: April 25, 11:59pm

Overview

For this exploration you will use `gcc` to generate assembly code for a program that makes function calls (linked from the course website).

Unoptimized

Generate an unoptimized version of the above program on one of the department `unix?` servers using `gcc -S unopt.c`.

Annotate each of the assembly instructions in the generated `unopt.s` file to explain what the instruction contributes to the computation. You do not need to annotate the directives (those pseudo-instructions that begin with a `.`). Your annotations should improve clarity by linking register names to the original variable names in the source program. The annotations are not meant to be English rewordings of the instructions.

View Optimized

You will **not** submit an annotation of the optimized version of this program. Instead, generate the optimized version (with the `-O3` flag, and submit a file named `what_calls` containing an explanation of what happened to the function calls (and the computation of 10^2).

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Submit your annotated `unopt.s` and `what_calls` files to the `431exploration2` directory for the `akeen` account.