

0.1 Problem Name and Description

1. **Problem name.** `GDB basics (a.out)` by Varsovie
2. **Problem difficulty.** 1.5
3. **Problem description.** Whenever you launch the program, you are met with the following prompt

`$ Enter a number :`

To which you are expected to input a number that is presumably compared to some password.

0.2 General Approach

As the title of the problem suggests, we should just rely on using the GNU Debugger `gdb` and step through the instruction set in order to determine what is going on, similar to what we did in the last problem. However, what I realized is that this program is *slightly* more complex than the former problem. In the former problem `level1`, we were simply just comparing each index of the string to a character, whereas in this problem, there is going to be a *loop*. The general approach is as follows:

1. Examine instruction set in `main`
2. Determine value that input is being compared to
3. Use any resources (if necessary)

0.3 Prerequisite Knowledge

1. `gdb` or any disassembler like `ghidra`
2. `python`
3. **Keywords:** Loops.

0.4 Walkthrough

0.4.1 Step 1: Run program through `gdb`

0.4.2 Step 2: Examine instruction set

0.4.3 Step 3: Write Python script to evaluate for comparison value

0.4.4 Step 4: Check answer