You will use your newly acquired gdb skills to reverse engineer three C programs, which have been compiled without the -d flag (hence the executables do not contain debugging information allowing you to inspect each line of the equivalent plain-text program). However, you can disassemble the programs.

Outcomes

- Gain more experience in the use of gdb
- Become more familiar with assembly, including the use of control routines

You CAN work in groups of 2 in completing this assignment. In that case, only a single person uploads .c files to Canvas, and the names of both people should be in the header of each file.

Retrieve the three executables *hw2_prog1*, *hw2_prog2*, and *hw2_prog3* from the following directory:

```
/home/jagodzf/public_html/teaching/csci247/homeworks/hw2-assembly
```

Your task

- Use gdb to set breakpoints for each of the three executables; each program has a `main` method
- Disassemble each program
- Compose three program files, *hw2_prog1.c*, *hw2_prog2.c*, and *hw2_prog3.c* which are the source code equivalents for the executables

Hints and suggestions

- Look up the opcodes (online) that you encounter in the disassembled programs
- Refer to the GDB tutorial pdf that is available for lab 3; consider using gdb's `layout asm`

Rubric and Submission

Upload your *hw2_prog1.c*, *hw2_prog2.c*, and *hw2_prog3.c* file to Canvas.

Correctness	Points
• *hw2_prog1.c* correctly reverse engineers hw2_prog1 • *hw2_prog2.c* correctly reverse engineers hw2_prog2 • *hw2_prog3.c* correctly reverse engineers hw2_prog3	10 15 20
Total	45 points

And, adhere to correct formatting. This is the quality component of code. You will be deducted points if your code is not of high quality.