Assignment 6: Reverse Engineering with GDB

CSCI 297E: Ethical Hacking

Due Date: 2024-05-21

Objective

In this assignment, you will reverse engineer a binary executable using GDB to discover a hidden password. The goal is to practice debugging and reverse engineering techniques.

Instructions

Objdump

Disassemble the binary to get the assembly code.

```
objdump -d -M intel assignment6 > assignment6.asm
```

GDB

1. Start GDB and load the binary:

   ```
   gdb ./assignment6
   ```

2. Set a breakpoint at the `main` function:

   ```
   break main
   ```

3. Run the program:

   ```
   run
   ```

4. Disassemble the current function:

   ```
   disas
   ```

5. Use GDB commands like `disas`, `info registers`, `x`, and `step` to analyze the binary and understand its behavior.

Submission

Submit a report detailing the steps you took to reverse engineer the binary and the discovered password.

Extra Credit

Recreate the binary in the language of your choice.