

Homework Assignment #4 – Reversing – Part I

Practical Cyber Security Fundamentals (CTF), Spring 2017
Department of Computer Science, Florida State University

Points: 45

Due: Beginning of the class (5:15pm) on February 20, 2017

Submission: You need to submit electronically via Blackboard by uploading a text file (named “**hw3-Firstname-Lastname.txt**”) for your answers and programs to the problems; you need to combine all the parts into a single file. Here replace “Firstname” using your first name and replace “Lastname” using your last name in the file name.

The main purpose of this assignment is to let you be familiar and become comfortable with reversing and analyzing binary files by understanding executable file structures and being able to use proper tools to disassemble the programs. You need to show your work in order to receive full credit.

Here are three binaries with different challenges. There are many ways to solve the challenges. Don't give up right away as reversing questions need patience.

Problem 1 (15 points) pat (from <http://www.cs.fsu.edu/~liux/courses/ctf/assignments/pat>) - Haha, you will never be able to get the flag.

Problem 2 (15 points) segf (from <http://www.cs.fsu.edu/~liux/courses/ctf/assignments/segf>) - Hmmmmmmmmmmmm Segmentation Fault (core dumped).

Problem 3 (15 points) jmper (from <http://www.cs.fsu.edu/~liux/courses/ctf/assignments/jmper>) - Not everything is at it seems.