

First Principles: Modularity

1. Time: 1-4
2. Lecture: No lecture; follow along activities
3. Activities
 - a. Activity: Compiling a C program to understand basic buffer overflow vulnerabilities
 - i. See <https://github.com/nerdprof/Writing-Your-First-Exploit/blob/master/simpleoverflow.c>
 1. Note: Compiled on Kali Linux without stack protections
 - b. Activity: Interacting with a network application (VulnServer) using netcat
 - c. Activity: Writing a fuzzer to crash a network application
 - i. See fuzzer.py
 - d. Activity: Turning a crash into an exploit
 - i. See exploit.py
 - e. Activity: Writing your own payload
 - i. As time permits
4. Additional References
 - a. Vulnserver
 - i. <http://www.thegreycorner.com/2010/12/introducing-vulnserver.html>
 - ii. <http://resources.infosecinstitute.com/fuzzing-vulnserver-discovering-vulnerable-commands-part-1/#gref>
 1. Note: Netcat used not Telnet
 - b. Exploiting Vulnserver
 - i. <https://samsclass.info/127/proj/vuln-server.htm>