**CS 430 – Introduction to Computer Security**

**Project 4**

1. Obtain the file overflow.zip from the textbook website (also on Canvas) and extract the Windows executable.

* Exploit the buffer overflow so that you bypass its serial number check. Submit a screen capture to verify your success.
* Determine the correct serial number. Submit the correct serial number.

1. Obtain the Windows executable contained in securityclass.zip (available on Canvas, but not from the book website). The file securityclass.exe is a Windows executable. Run it from a command prompt. Write a program which will repeatedly call securityclass.exe using linearization attack to determine the correct seven-digit serial number.

Submit the source code of your program and the correct serial number.

**Hint:**

To run securityclass.exe manually do the following:

1. Open the windows command line terminal  
2. Navigate to the folder where you put securityclass.exe  
3. Type: securityclass.exe [serial]  
  
Note that securityclass.exe takes a serial number as a command line argument. So if you guess that the serial number may be 0000000, run it as follows:

securityclass.exe 0000000

You may have to run your program several times since execution times may be variable.

*What to upload in a compressed folder (Canvas):**Your code, the results, your conclusions/observations.*