

## CS 12 - Lab 6

### Classes

In this lab you will be writing your first class. You will learn how to separate your program into separate files and how to use a makefile to compile. Be sure to include all necessary information at the top of each file and use good commenting and style throughout your program.

Write a class that maintains a Social Security number. A SSN is too long to fit into a variable of integer type. There are also advantages to storing each part of the SSN separately (instructors use the last four digits for example). Your class should have the following members:

**Data members** You should use three integers to maintain each part of the SSN.

**Set** Write a function that allows the user to set the SSN. The user should be able to enter the SSN with the dashes shown. For example, if the user enters “565-90-2321”, then the following should be set in the class, *part1* = 565, *part2* = 90, and *part3* = 2321.

**Print** Output the parts of the SSN to look appropriate, show the dashes. Remember to make sure that it prints the correct number of digits for each part. Try “000-00-0000” to make sure that it works correctly.

**Last Four** Return the last four digits (the last part) of the SSN.

Now write a short main program that keeps a list of 10 SSNs. You should allow the user to enter all the numbers. After setting each SSN, print the list of SSNs. Lastly, search for a SSN with a specified last four digits. Ask the user for a four digit number (as an integer). You should search through the list and inform the user if the number exists as the last four digits of any SSN in the list. Specify all positions in the list if any exist, or say that none exist.