Final Project Options

**Address Book -** Write an application that acts like an address book. Each entry in it should contain first and last name, phone number, and email. It should be able to sort by at least one field (like last name) - more would be excellent! Next, make it be able to only print entries that match certain criteria (like certain area codes or first names beginning with A).

**Calculator -** Write a program that acts as a calculator. It should take integers and decimals, and do addition, subtraction, multiplication, division, exponents, and give error messages when something is typed wrong. An excellent project will also do modulus, factorial, square roots, and if you press a certain button, it displays a manual of how to use it.

**Quiz Maker** – Make an application which takes various questions form a file, picked randomly, and puts together a quiz for students. Each quiz can be different and then reads a key to grade the quizzes.

**Product Inventory Project** – Create an application which manages an inventory of products. Create a product class which has a price, id, and quantity on hand. Then create an inventory class which keeps track of various products and can sum up the inventory value.

**Movie Store** – Manage video rentals and controls when videos are checked out, due to return, overdue fees and for added complexity create a summary of those accounts which are overdue for contact.

**Student Grade Book Application** – Keep track of students (with a student class that has their name, average, and scores) in a class and their grades. Assign their scores on tests and assignments to the students and figure out their average and grade for the class. For added complexity put the students on a bell curve.

**Bank Account Manager** - Create a class called “Account” which will be an abstract class for three other classes called “CheckingAccount”, “SavingsAccount” and “BusinessAccount”. Manage credits and debits from these accounts through an ATM style program.

**Library Catalog** – Create a book class with a title, page count, ISBN and whether or not it is checked out or not. Manage a collection of various books and allow the user to check out books or return books. For added complexity generate a report of those books overdue and any fees. Also allow users to put books on reserve.