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**Description**: A command line C++ program created for my Computer Science II course which simulates a mock library system that manages and holds various objects such as patrons (people who use the library), DVDs, and books.

**Title**: Smallsville Library Management System

## \*UPDATE\*

The program can now store other items such as DVDs, Audiobooks, and Reference books.

\*DISCLAIMER\*: Though this program is fairly large, there are some things still not functional in it yet. At the moment, the patron's names are not alphabetized. Also, there is currently no saving feature in this program, meaning that once the program ends, all of the data is lost. Additionally, the fine rate system is very simple. You can add money onto a person's fine amount, and change their fine rate depending on how long they have lost the book for. However, the program does not use any time functions at the moment, so the fine amount for a patron will not update every time you open the program (meaning that the weekly fine rate attribute in the "Patrons" class, does not function at the moment, it just tells what the weekly fine rate is supposed to be). However, you can still use the fine amount attribute in the "Patrons" class to manually add money to the patron's account. Also, when printing out, editing information on, or removing a single item (patron, book, etc.), try not to type in an ID number that does not exist in the system (this may cause segmentation faults). You can also create duplicates of items currently. Lastly, try to keep all data typed as accurate to the instructions as possible, as to avoid any unforeseen or hidden bugs that may still lie in the program.

## HOW TO COMPILE AND EXECUTE:

- 1. Download the files into a directory of a terminal on your computer (make sure that your terminal application can compile and execute C++ code).
- 2. Type into the terminal: "g++ main.cpp" (without the quotes) to compile the program.
- 3. Type into the terminal: "./a.out" (without the quotes) to execute the program.