|  |  |
| --- | --- |
| **Application/ Program name:** | CH10\_EX12.exe |
| **Written by:** | Allen J Myers, Michael Rearden, Robert Hanson, Ryan Jeffrey |

|  |
| --- |
| **Purpose or problem definition:** |
| Using the classes designed in Programming Exercises 10 and 11, write a program to simulate a bookstore. The bookstore has two types of customers: Those who are members of the bookstore and those who buy books from the bookstore only occasionally. Each member has to pay a $10 yearly membership fee and receives a 5% discount on each book purchased. For each member, the bookstore keeps track of the number of books purchased and the total amount spent. For every eleventh book that a member buy, the bookstore takes the average of the total amount of the last 10 books purchased, applies this amount as a discount, and then resets the total amount spent to 0. Write a program that can process up to 1000 book titles and 500 members. Your program should contain a menu that gives the user different choices to effectively run the program; in other words, your program should be user driven. |
|  |
| **Program Procedures:** |
| System launches and provides the user with a menu and options to choose from regarding purchasing, viewing stock, and viewing membership information. |
|  |
| **Algorithm/Processing/Conditions:** |
| **Inputs:** |
| User choice for menu access. File input and reading of information to output. |
| **Processes:** |
| System will process depending on user input. |
| **Outputs:** |
| System will output the information requested by the user. |
|  |
| **Notes & Restriction:** |
| System is restricted to the options provided in the user menu. |
|  |
| **Comments:** |
| Very large and basic implementation of a pseudo book store style program. |