Serendipity Booksellers Software Development Project— Part 13: A Problem-Solving Exercise

1. Convert the `BookData` Structure to a Class.

The program currently keeps data about books in a structure called `BookData`. Convert the structure declaration to a class declaration. The existing member variables should be made private.

2. Convert Functions to Member Functions.

In Chapter 11 you created the following functions for directly accessing or manipulating the member variables of the `BookData` structure:

```
setTitle
setISBN
setAuthor
setPub
setDateAdded
setQty
setWholesale
setRetail
isEmpty
removeBook
```

Because the structure is now a class, and the member variables are private, you will need to convert these functions to member functions of the `BookData` class.

3. Add New Accessor Functions for Retrieving Data from the `BookData` Class.

Because the `BookData` member variables are now private, you will need to add member functions to retrieve their values. Add the following functions to `BookData`:

`getTitle`:	Will be used to get the contents of the `bookTitle` array.
`getISBN`:	Will be used to get the contents of the `isbn` array.
`getAuthor`:	Will be used to get the contents of the `author` array.
`getPub`:	Will be used to get the contents of the `publisher` array.
`getDateAdded`:	Will be used to get the contents of the `dateAdded` array.
`getQty`:	Will return the contents of the `qtyOnHand` member.

`setWholesale`: Will return the contents of the `wholesale` member.
`getRetail`: Will return the contents of the `retail` member.

4. Convert the Remainder of the Program to Use the Class.

Now that `BookData` is a class with private member variables, the `addBook`, `lookUpBook`, `deleteBook`, `removeBook`, and `cashier` functions must be modified. Instead of accessing the private member variables directly, these functions must use the class's member functions you created in step 2.