```cpp
  // Tyler Baker
// 4.21.15
// Book.cpp 1.0

#include "Book.h"
#include <iostream>
using namespace std;



/* CONSTRUCTOR */
Book::Book()
{
  books  = new  BookData [arraySize ];
}

Book::~Book()
{
  delete  [] books ;
}

Book::Book(const Book &rhs)
{
  numBooks  = rhs.numBooks ;
  arraySize  = rhs.arraySize ;

  for(int  i = 0; i < numBooks ; i++)
  books [i] = rhs.books [i];

}

Book &Book::operator=(const Book &rhs)
{
  if(this != &rhs){
  numBooks  = rhs.numBooks ;
  arraySize  = rhs.arraySize ;

  for(int  i = 0; i < numBooks ; i++)
    books [i] = rhs.books [i];
  }

  return  *this;
}

/* Member Functions */
bool Book::addBook(int  isbnIn , string titleIn , int  yearIn ,
string authorIn )
{
  char badIsbnCatch;
  bool isbnGood = false;

  while(!isbnGood){
  isbnGood = true ;
  for(int  i = 0; i < numBooks ; i++){

    if(books [i].isbn  == isbnIn  && (isbnGood)){
    isbnGood = false;
    cout  << "The ISBN (" << isbnIn  << ") is already in the
database" << endl ;
```

```
58        cout << "Would you like to change the ISBN (i) or cancel
      (c)? (i/c): ";
59        cin >> badIsbnCatch;
60        if(badIsbnCatch == CHANGE){
61          cout << endl << "Please enter a new ISBN: ";
62          cin >> isbnIn;
63        }
64        else
65          return false;
66        }
67      }
68      }
69      if(numBooks == arraySize){
70      int newSize = arraySize * 1.5;
71
72      BookData *newArr = new BookData[newSize];
73
74
75      for(int i = 0; i < arraySize; i++)
76        newArr[i] = books[i];
77
78
79      arraySize = newSize;
80
81      delete [] books;
82      books = newArr;
83      numBooks++;
84      }
85
86
87      books[numBooks].isbn = isbnIn;
88      books[numBooks].title = titleIn;
89      books[numBooks].year = yearIn;
90      books[numBooks].author = authorIn;
91
92
93
94
95
96      cout << books[numBooks].isbn << "|" << books[numBooks].title
      << "|" << books[numBooks].year << "|" << books[numBooks].author
      << "|" << numBooks+1 << endl;
97
98      numBooks++;
99
100
101     return true;
102
103   }
104
105   int Book::getIsbn(int index)
106   {
107     return books[index].isbn;
108   }
109
110   string Book::getTitle(int index)
111   {
112     return books[index].title;
113   }
```

```
114
115   int Book::getYear(int index)
116   {
117     return books[index].year;
118   }
119
120   string Book::getAuthor(int index)
121   {
122     return books[index].author;
123   }
124
125
126
127
128
```