```java
 1  package org.adrianl.jaxb;
 2
 3  import org.adrianl.jaxb.model.Book;
 4  import org.adrianl.jaxb.model.Bookstore;
 5
 6  import javax.xml.bind.JAXBException;
 7  import java.io.File;
 8  import java.util.ArrayList;
 9  import java.util.List;
10  import java.util.stream.Collectors;
11
12  public class App {
13      public static void main(String[] args) {
14          String DATA_XML = System.getProperty("user.dir") + File.separator + "data"
          + File.separator + "bookstore.xml";
15          String DATA_XML_LUIS_VIVES = System.getProperty("user.dir") + File.
          separator + "data" + File.separator + "bookstore_luis_vives.xml";
16          System.out.println(DATA_XML);
17
18          System.out.println("Iniciamos el controlador");
19          JAXBController controller = JAXBController.getInstance();
20          System.out.println();
21
22          System.out.println("*** JDOM XML *** ");
23
24          List<Book> bookList = new ArrayList<Book>();
25
26          // Creamos los libros
27          Book book1 = new Book();
28          book1.setIsbn("978-0134685991");
29          book1.setName("Effective Java");
30          book1.setAuthor("Joshua Bloch");
31          book1.setPublisher("Amazon");
32          bookList.add(book1);
33
34          Book book2 = new Book();
35          book2.setIsbn("978-0596009205");
36          book2.setName("Head First Java, 2nd Edition");
37          book2.setAuthor("Kathy Sierra");
38          book2.setPublisher("amazon");
39          bookList.add(book2);
40
41          // Creamos la librería y le asignamos los libros
42          Bookstore bookstore = new Bookstore();
43          bookstore.setName("Amazon Bookstore");
44          bookstore.setLocation("New York");
45          bookstore.setBookList(bookList);
46
47          try {
48              // Vemos el XML y lo imprimimos
49              controller.setBookstore(bookstore);
```

```java
50            System.out.println("Pasando de Objetos a XML");
51            controller.printXML();
52            controller.writeXMLFile(DATA_XML);
53            System.out.println();
54
55            // Leemos el XML y lo pasamos a objetos
56            System.out.println("Pasando de XML a Objetos");
57            bookstore = controller.getBookstore(DATA_XML);
58            System.out.println(bookstore.toString());
59            System.out.println();
60            System.out.println("Todos los libros");
61            bookstore.getBooksList().forEach(System.out::println);
62            System.out.println("Libros de autor que tiene la palabra sierra");
63            bookstore.getBooksList().stream().filter(book -> book.getAuthor().
      toLowerCase().contains("sierra")).forEach(System.out::println);
64            System.out.println();
65
66            // incluso podríamos crearnos un fichero solo para ese bookstore de sierra
67            System.out.println("Creando BookStore de Luis Vives");
68            Bookstore bookstoreLuisVives = new Bookstore();
69            bookstoreLuisVives.setName("IES Luis Vives Bookstore");
70            bookstoreLuisVives.setLocation("Leganés");
71            List<Book> bookListAutorSierra = bookstore.getBooksList().stream().filter(
      book -> book.getAuthor().toLowerCase().contains("sierra")).collect(Collectors.toList
      ());
72            bookstoreLuisVives.setBookList(bookListAutorSierra);
73            controller.setBookstore(bookstoreLuisVives);
74            controller.printXML();
75            controller.writeXMLFile(DATA_XML_LUIS_VIVES);
76            System.out.println();
77
78        } catch (JAXBException e) {
79            System.err.println("ERROR:" + e.getMessage());
80        }
81    }
82 }
83
```