**Books Handout: Assume all classes are in the books package and that all necessary import statements are provided – do NOT add a package statement to this code and do NOT add import statements.**

**public class Book implements Comparable<Book>{**

**private String ISBN;**

**private int pageCount;**

**public Book(String ISBN, int pageCount) {**

**this.ISBN = ISBN;**

**this.pageCount = pageCount;**

**}**

**public String getISBN() {**

**return ISBN;**

**}**

**public int getPageCount() {**

**return pageCount;**

**}**

**@Override**

**public int compareTo(Book otherBook) {**

**//MISSING CODE**

**}**

**}**

**-----------------------------------------------------------**

**public class IllegalISBNException extends RuntimeException{**

**public IllegalISBNException() {**

**}**

**public IllegalISBNException(String msg) {**

**super(msg);**

**}**

**}**

**------------------------MORE ON BACK-------------------->>>**

**public class BookList {**

**private ArrayList<Book> books;**

**public BookList() {**

**books = new ArrayList<Book>();**

**}**

**public void addBook(Book book) {**

**// THIS METHOD WILL BE MODIFIED**

**books.add(book);**

**}**

**public void naturalSort() {**

**//MISSING CODE**

**}**

**public void sortByPageCount() {**

**//MISSING CODE**

**}**

**}**

**-----------------------------------------------------------**

**public class BookDriver {**

**public static void main(String[] args) throws**

**FileNotFoundException {**

**Scanner dataIn = new Scanner(new File("books.txt"));**

**BookList books = new BookList();**

**String ISBN = null;**

**int numberOfPages = 0;**

**while (dataIn.hasNext()) {**

**ISBN = dataIn.next();**

**numberOfPages = dataIn.nextInt();**

**books.addBook(new Book(ISBN, numberOfPages));**

**}**

**}**

**}**