Handout 7

1. String: Class

The String class represents character strings.

Create a String object:
String str1 = new String("Jim");

The class String includes methods for comparing strings, for creating a copy of a string with all characters translated to uppercase or to lowercase:
String str2 = new String("jim");
str1.compareTo(str2);
      the value != 0 because the strings are not equal
str1.toLowerCase ().compareTo(str2.toLowerCase ())
      the value == 0 because the strings are equal

You can find more methods on the website:
http://java.sun.com/j2se/1.4.1/docs/api/java/lang/String.html

2.
In hw4, there are two classes: book and bookstore. Class book describes each type of book stored in this bookstore. So it has variables:

        private String bookname;
        private String author;
        private double price;
        private int number;

When customers buy books, the corresponding book number will decrease; see the method public boolean out_b(int n). The function returns a boolean answer, because we need to check whether the number of books we have sold exceeds the number of books we have in stock. So if n<=number, the function returns true, and if n> number, it returns false.

When the bookstore buys books from publishers, the corresponding book number will increase; see the method public boolean in_b(int n)

The bookstore class describes the activities of this bookstore. So the variables include:
     private book [] booklist = new book[10]; this is an array of book objects
     private int used;
When some customers buy books, we use the method public void sell(String bn, int n). First, we search whether this type of book exists in booklist. If yes, we attempt to sell it by calling the method: out_b(n). If out_b returns true, print out that we succeed in selling the book. If it returns false, print out that there are not enough copies of the book. If the book is not in our list of books that we carry, print out that we don't carry this book

When the bookstore buys books from publishers, we use the method public void order(String bn, String au, double p, int n). First, we search whether this type of book exists in our booklist. If yes, we increase its number by calling the method: in_b(n). If not, we create a new book object in the booklist. We also need to print out the books we have in the bookstore. For that, we use the method public void print_bs(). This prints out each book object in booklist and calls public void print_all().