

## Homework 5

1. Define a class named `Book` that represents a book about Java Programming Language, and it contains:
  - An int data field named *pages* that stores the number of pages in the book.
  - A String data field named *publisher* that represents the publisher of the book.
  - A constructor with parameters for initializing pages and publisher.
  - The getter and setter methods for all data fields.
  - A `toString` method that returns book information (summary), including the book's publisher and pages.
  - The `equals` method that returns true if two books have the same publisher **and** the same number of pages.
  - The `compareTo` method that compares two books and returns -1 if the first book has fewer pages than the second one, 1 if the first book has more pages than the second one, and 0 if both books have the same number of pages.
2. Write an application `TestBooks` that asks the user for a number of books to review. The application repeatedly creates that many `Book` objects with number of pages to be a random integer, 1-100, inclusive, and publisher data from the user. The program prints to the screen the information (summary) about the "biggest" book, (i.e. the book with the bigger number of pages), as well as the average number of pages of the `Book` objects created.

*HINT: This program MUST make use of the `compareTo` method in order to find the "biggest" book.*