### **Collections Practice**

## 1)

Item: fields (name, price, quantity)

Order: fields (id, total, ArrayList of items). If the total is above 200 euros, for every 100 euros above 200 give a 5% discount.

Customer: fields (name, age, address, list of orders)

**Main:** Create a queue of customers (either priority or a normal queue), add the customers to it. Then show which customer is at the top of the queue. Serve the customer and remove it from the queue.

Print the remaining customers and the list of their orders.

# 2)

#### Student

- Make name and average data members, they are private!
- Add constructor and getter/setter. The name should be read-only, the average should be readable and modifiable.

#### **TreeSet**

- Let's create a TreeSet, fill in with the students. Implement Comparable interface: (otherwise you will encounter ClassCastException) we compare based on average.
- List those with an average higher than 3.0 in ascending order of average. (use tailSet().)