



# Informatik I

Exercise session 12

Autumn 2019

# Use case

## Products and orders

Keep track of available products, prices, and of customer's orders.

# Products and orders

Implement an order-management system that tracks available products, prices, orders (with multiples of the same product in the same order), and prices.

The system should automatically calculate the total price of each order.

# Products and orders: usage

Design the class so that, in the **main** method:

- we can construct an indexed inventory of products (each with a product code and its price);
- we can construct a collection of orders;
- we can add items to the orders;
- we can print out products and orders (and their prices).

# Products and orders: change prices

Start from the code from week 7 and update it to use the right Java collections.

Finding an inventory product by its code should be done in  $O(1)$ .

The orders should be a set, and each contains a set of items.