

**Exercise 21: Cars revisited**

The Car class from exercise 20 should be revised such that each car in a car register *also* has a serial number, e.g. 17.

A counter denoting the last given serial number is common for all the cars in the car register.

It is possible to get the next unused serial number.

**Question 1:** Make a class `Car2` that represents car information and has methods for performing the operations mentioned in exercise 20 and above. The class should have a constructor with the same signature as in exercise 20 (but the body must be modified).

**Hint:** Let the counter be a static variable.

**Question 2:** Make a class `TextCar2` that creates some car objects and prints information about them.

**Exercise 22: Water temperatures**

Solve examination exercise 2 from ITU, January 2000. (Is found on the course homepage.)

**Exercise 23: Operations on arrays**

This exercise is about making simple operations on integer arrays in the form of a class `ArrayUtils`. All the methods in the class should be declared **public** and **static**.

- `String arrayToString(int[] a)`  
returns a character string consisting of all the elements in the array `a` separated by a space between each number.
- `int occurrences(int[] a, int n)`  
returns the number of elements in the array `a` that are equal to `n`.  
Example: `occurrences(new int[]{1, 3, 3, 2, 1}, 3)` yields 2.
- `int sum(int[] a)`  
calculates the sum of all the elements in the array `a`.

Make a class `TestArrayUtils` that tests your `ArrayUtils` class.