

## Second practice

This practice aims for gain practical knowledge in basic JavaScript mechanics. You will try to solve tasks with these mechanics:

- Variable declaration
- Conditions
- Cycles
- Function creation
- Array creation and manipulation

### Task 1

Your task is to implement simple sort algorithm – *Bubble sort*. Use this algorithm to sort array filled with numbers. Numbers in array - 15,25,1,3,4,87,2,34,6,66,12.

First step to solve this sorting problem is to create array with numbers. Then, with cycles, condition and exchange function create *Bubble sort* sorting algorithm.

### Task 2

You have given number **C** – for illustration we use numbers 3 and 4. When you enter number, your JavaScript program will type patter with **C \* C** size. First number of this pattern is 1 and last number of this pattern is number **C\*C**. Sequence in pattern is shown below:

Patten:

1;2;3;	1;2;3;4;
6;5;4;	8;7;6;5;
7;8;9;	9;10;11;12;
16;15;14;13;	

You need to use cycles, conditions, and some mathematical operation to successful pattern creation. As number separator you can use any symbol (recommnd space or special symbols). Input number can be hardcoded in your solution.

### Task 2 – extension

Task extension is to write multiple patterns in rectangle. Extend you code to create rectangle of **X \* Y** size. **X** and **Y** number can be hardcoded in your program.

### **X\*Y rectangle pattern**

1;2;3; 1;2;3; 1;2;3;

6;5;4; 6;5;4; 6;5;4;

7;8;9; 7;8;9; 7;8;9;

1;2;3; 1;2;3; 1;2;3;

6;5;4; 6;5;4; 6;5;4;

7;8;9; 7;8;9; 7;8;9;