Problem 1

Write a program which prints elements of an array in one line, separated with spaces.

Problem 2

Write a program which finds the difference between the maximum and minimum elements of a given array.

Problem 3

Let arr be the reference to an array of ints created in the program.

Create and print another array (brr), which will contain elements from the first array, but only even and in the reversed order than in arr.

For example, if arr has elements $[1, 4, 2, 5, 8, 6]$, then brr should be $[6, 8, 2, 4]$.

After modifications of the size and/or values of elements of the array arr, the program should work correctly without any other changes.

[Note: it is allowed in Java to create arrays with zero size.]

Problem 4

Let arr be the reference to an array of ints created in the program.

The program counts how many times it happens that in this array three consecutive elements are in strictly increasing or strictly decreasing order.

For example, if arr has elements $[1, 4, 5, 3, 2, 0, 0, 1, 5]$, then there are four such subsequences: $1 \to 4 \to 5$, $5 \to 3 \to 2$, $3 \to 2 \to 0$ and $0 \to 1 \to 5$.

After modifications of the size and/or values of elements of the array arr, the program should work correctly without any other changes.

Problem 5

Write a program which

1. defines an array of ints;
2. prints its elements in one line, comma separated (but without a comma after the last one);
3. finds the index of the smallest element of the array – if there are more than one with the same, minimum, value, then of the first of them;
4. finds the index of the greatest element of the array – if there are more than one with the same, maximum, value, then of the last of them;
5. swaps the elements with the indices found;
6. prints the array again (as in item 2);
7. prints the array in the reversed order.

For example, if the array is defined as

```
int[] a = {4, 3, 1, -2, 4, -2, 2, 4, 3};
```

then the result should be

```
4, 3, 1, -2, 4, -2, 2, 4, 3
4, 3, 1, 4, 4, -2, 2, -2, 3
3, -2, 2, -2, 4, 4, 1, 3, 4
```
