## Merge Sort

**Description** In this lab assignment your job is to implement Merge-Sort. See the textbook for the algorithm and its pseudo-code. You must output the given elements (integers) in non-decreasing order.

**Input structure** The input starts with an integer number which indicates the number of elements, n. Then, the elements follow, one per line.

**Output structure** Output the elements in non-decreasing order. Each element must be followed by ;.

## Examples of input and output:

## Input 6 5 3 2 1 6 4 Output 1;2;3;4;5;6;

Note that the output has only one line and has no white characters. See the lab guidelines for submission/grading, etc., which can be found in Files/Labs.