INPUT:
Input an integer N, and then input N numbers.

OUTPUT:
Output the N sorted elements

Insertion sort Pseudo code:

```
1: n ← INPUT                                                          ▷ Input n
2: for i ← 0 to n − 1 do                                              ▷ Input n numbers
3:     A[i] ← INPUT
4: end for
5:
6: for i ← 0 to N − 1 do                          ▷ Do N rounds to make sure all elements sorted
7:     for j ← i to 1 do      ▷ Find correct position for A[i], make sure current i elements are sorted
8:         if A[j] < A[j − 1] then                                    ▷ If j'th is smaller than (j-1)'th
9:             SWAP(A[j], A[j − 1])                                   ▷ swap smaller one to left hand side
10:        end if
11:    end for
12: end for
13:
14: Array A is sorted,
15: OUTPUT ← A[0...N − 1]
```