

## 1. Insertion sort:

Input: Possibly unsorted array of data.

Output: Sorted array of data.

Begin

For i = 1 to length(array-1)

Begin

tmp = array[i];

j = i - 1;

while j >= 0 && array[j] > tmp

Begin

array[j + 1] = array[j];

j--;

End

Array[j + 1] = tmp;

Print the contents of the partly sorted array as a semi colon delimited list ending with a newline.

End

End

## 2. Selection Sort:

Input: Possibly unsorted array of data.

Output: Sorted array of data.

Begin

For i = 0 to length(array)-1

Begin

Select the smallest element from array[i] to array[length(array)-1];

Swap the smallest element with array[i];

Print the contents of the partly sorted array as a semi colon delimited list ending with a newline.

End

End

## 3. Bubble Sort

Input: Possibly unsorted array of data.

Output: Sorted array of data.

ascending

Begin

For i = 0 to length(array)-2

Begin

For j = length(array)-1 down to i+1

Begin

If elements in position j and j-1 are out of order, swap them

End

Print the contents of the partly sorted array as a semi colon delimited list ending with a newline.

End

End

## 4. Comb Sort

Input: Possibly unsorted array of data.

Output: Sorted array of data.

Begin

gap = length(array)

swapped = false;

while gap > 1 or swapped

Begin

Swapped = false

If gap > 1

Begin

gap = floor(gap/1.3)

End

i = 0

while i + gap < length(array)

Begin

if array[i] > array[i + gap]

Begin

swap array[i] with array[i + gap]

set swapped to true.

End

i += 1

End

Print the contents of the partly sorted array as a semi colon delimited list ending with a newline.

Print the gap as follows: Gap: {gap}\n

//So if gap = 4 then the output should be: Gap: 4\n

End

End