/\* package codechef; // don't place package name! \*/

import java.util.\*;

import java.lang.\*;

import java.io.\*;

/\* Name of the class has to be "Main" only if the class is public. \*/

class Codechef

{

public static void main (String[] args) throws java.lang.Exception

{

int[] arr={99, 88, 77, 66, 55};

//insertionSort(arr);//element is inserted in the sorted array such that array remains sorted.

//selectionSort(arr);//smallest element is palced at its correctposition.

bubbleSort(arr);//largest element is palced at its correct position.

display(arr);

}

public static int[] insertionSort(int[] arr){

for(int counter=1;counter<arr.length;counter++)

{

int val=arr[counter];

int j=counter-1;

while(j>=0&&arr[j]>val)

{

arr[j+1]=arr[j];

j--;

}

arr[j+1]=val;

}

return arr;

}

public static int[] selectionSort(int[] arr){

for(int counter=0;counter<arr.length-1;counter++){

int min=counter;

for(int j=counter+1;j<arr.length;j++){

if(arr[j]<arr[min])

min=j;

}

int temp=arr[min];

arr[min]=arr[counter];

arr[counter]=temp;

}

return arr;

}

public static int[] bubbleSort(int[] arr){

int k=arr.length;

for(int counter=0;counter<arr.length-1;counter++){

for(int j=0;j<k-1;j++){

if(arr[j]>arr[j+1]){

int temp=arr[j];

arr[j]=arr[j+1];

arr[j+1]=temp;

}

}

k--;

}

return arr;

}

public static void display(int[] arr){

for(int i=0;i<arr.length;i++){

System.out.print(arr[i]+" ");

}

}

}