#include<bits/stdc++.h>

using namespace std;

void comp(int a, int b){

cout<<"Comparing "<<a<<" and "<<b<<endl;

}

void swapnum(int a, int b){

cout<<"Swapping "<<a<<" and "<<b<<endl;

}

void insertionsort(int arr[], int n){

for(int i=0;i<n-1;i++){

int j = i+1;

while(j>0){

comp(arr[j],arr[j-1]);

if(arr[j]<arr[j-1]){

swapnum(arr[j-1],arr[j]);

swap(arr[j],arr[j-1]);

j--;

}

else{

break;

}

}

}

for(int i=0;i<n;i++){

cout<<arr[i]<<endl;

}

}

int main(){

int n;

cin>>n;

int arr[n];

for(int i=0;i<n;i++){

cin>>arr[i];

}

insertionsort(arr,n);

}