#include <iostream>

#include <iomanip>

#include <cstdlib>

#include <ctime>

using namespace std;

void RANDNUMBERS(int A[], int n);

void INSERTIONSORT(int A[], int n);

int main()

{ srand(time(0));

const int n=10;

int A[n], j;

RANDNUMBERS(A, n);

INSERTIONSORT(A, n);

cout<<endl;

for (int j=0; j<n; j++) cout<<A[j]<<" ";

}

void INSERTIONSORT(int A[], int n)

{for (int j=1; j<n; j++)

{int key=A[j];

int i=j-1;

while((i>=0) && A[i]>key)

{A[i+1]=A[i];

i=i-1;

}

A[i+1]=key;

}

}

void RANDNUMBERS(int A[], int n)

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

{ A[i-1]=1+rand() % 100;

cout<<setw(5)<<A[i-1];

if(i % 10 ==0) cout << endl;

}

}