//SE 47(CPPArray)

#include<iostream>

using namespace std;

class CppArray

{

private:

int a[10],i,j,n,b[10],temp;

public:

void get();

void print();

void sort();

void range();

void exchange();

int size();

};

void CppArray::get()

{

cout<<"\n Enter the limit of array ";

cin>>n;

cout<<"\n Enter the array elements ";

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

{

cout<<"\n a["<<i<<"]=";

cin>>a[i];

}

}

void CppArray::print()

{

cout<<"\n The entered array is ";

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

{

cout<<"\n a["<<i<<"]="<<a[i];

}

}

void CppArray::sort()

{

for(j=0;j<n;j++)

{

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

{

if(a[i]>a[i+1])

{

temp=a[i+1];

a[i+1]=a[i];

a[i]=temp;

}

}

}

cout<<"\n The sorted array is ";

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

{

cout<<"\n a["<<i<<"]="<<a[i];

}

}

void CppArray::range()

{

cout<<"\n The range of array is from "<<a[0]<<" to "<<a[n-1];

}

void CppArray::exchange()

{

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

{

b[i]=a[i];

}

cout<<"\n The exchanged array is ";

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

{

cout<<"\n b["<<i<<"]="<<b[i];

}

}

int CppArray::size()

{

return n;

}

int main()

{

int a;

CppArray obj;

obj.get();

obj.print();

obj.range();

obj.exchange();

obj.sort();

a=obj.size();

cout<<"\n The size of array is "<<a;

return 0;

}

Enter the limit of array 5

Enter the array elements

a[0]=5

a[1]=4

a[2]=3

a[3]=2

a[4]=1

The entered array is

a[0]=5

a[1]=4

a[2]=3

a[3]=2

a[4]=1

The range of array is from 5 to 1

The exchanged array is

b[0]=5

b[1]=4

b[2]=3

b[3]=2

b[4]=1

The sorted array is

a[0]=1

a[1]=2

a[2]=3

a[3]=4

a[4]=5

The size of array is 5