#include<stdio.h>

int partition(int a[25],int low,int high)

{

int p,i,j,temp;

p=a[low];

i=low+1;

j=high;

while(low<high)

{

while(a[i]<=p&&i<high)

i++;

while(a[j]>p)

j--;

if(i<j)

{

temp=a[i];

a[i]=a[j];

a[j]=temp;

}

else

{

temp=a[low];

a[low]=a[j];

a[j]=temp;

return j;

}

}

return j;

}

void sort(int a[],int low,int high)

{

if(low<high)

{

int s=partition(a,low,high);

sort(a,low,s-1);

sort(a,s+1,high);

}

}

int main()

{

int i, n, a[25];

printf("Enter the array size: ");

scanf("%d",&n);

printf("Enter array elements:",n);

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

scanf("%d",&a[i]);

sort(a,0,n-1);

printf("Order of Sorted elements: ");

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

printf(" %d",a[i]);

return 0;

}

Output:

Enter the array size: 4

Enter array elements:

42

63

71

2

Order of Sorted elements: 2 42 63 71

=== Code Execution Successful ===