13.SORT THE LIST OF NUMBERS USING PASS BY REFERENCE

Aim:

To write a c program to sort an array of N numbers using pass by reference.

Algorithm:

Step 1:Start the program

Step 2:read the no of array elements n

Step 3:read the array elements Ai outer index I varies from last element to first

Step 4:outer index I varies from last element to first element

Step 5:Index j varies from first element to i-1

Step 6:compare elements Aj and aj+1

Step 7:if out of order then swap the elements

Step 8:Display array elements after each pass

Step 9:Display the final sorted list

Step 10:Stop

Program coding:

```
#include<stdio.h>
#include<conio.h>
void main()
{
int n,a[100],i;
void sortarray(int*,int);
clrscr();
printf("\n enter the no of elements:");
scanf("%d",&n);
for(i=0;i<n;i++)
{printf("\n enter the array element:");
scanf("%d",&a[i]);}
sortarray(a,n);
printf("\n after sorting\n");
for(i=0;i<n;i++)
```

```
{printf("%d\n",a[i]);
getch();
}}
void sortarray(int *arr,int num)
{
int i,j,temp;
for(i=0;i<num;i++)
{for(j=i+1;j<num;j++)
{if(arr[i]>arr[j])
{temp=arr[i];
arr[i]=arr[j];
arr[j]=temp;
}} }}
```

Output: