

Write a C program to sort an array of integers in ascending order and display the sorted array and number of passes performed for sorting.

```
#include<stdio.h>

void swap(int *xp,int *yp)

{

int temp=*xp;

*xp=*yp;

*yp=temp;

}

int bubblesort(int arr[],int n)

{

int i,j,count=0;

int s;

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

{

s=0;

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

{

if(arr[j]>arr[j+1])

{

swap(&arr[j],&arr[j+1]);

s=1;

count++;

}

}

}
```

```
if(s==0)
break;
}
return count;
}
void printArray(int arr[],int size)
{
int i;
for(i=0;i<size;i++)
printf(“%d”,arr[i]);
printf(“\n”);
}
int main()
{
int arr[50],num,i;
printf(“enter the number of elements”);
scanf(“%d",&num);
printf(“enter the elements”);
for(i=0;i<num;i++)
{
scanf(“%d",&arr[i]);
}
int c=bubblesort(arr,num);
printf(“sorted array:\n”);
printArray(arr,num);
```

```
printf("number of passes:%d\n",c);
```

```
return 0;
```

```
}
```