**PROGRAM 1**

**/\* Write a c program to sort an array of integers in ascending order or descending order and display the sorted array and number of passes performed for sorting. \*/**

#includestdio.h

voidswap(int\*xp,int\*yp)

{

inttemp=\*xp;

\*xp=\*yp;

\*yp=temp;

}

intbubbleSort(intarr[],intn)

{

inti,j,count=0;

intswapped;

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

{

swapped=0;

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

{

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

{

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

swapped=1;

count++;

}

}

if(swapped==0)

break;

}

returncount;

}

voidprintArray(intarr[],intsize)

{

inti;

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

printf("%d",arr[i])

printf("\n");

}

intmain()

{

intarr[50],num;

printf("enterthenumberofelements");

scanf("%d",&num);

printf("entertheelements");

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

}