Aim:

Write a program to sort the elements in descending order with bubble sort technique using functions.

Exp. Name: Write a C program to sort the list of numbers using bubble sort and

At the time of execution, the program should print the message on the console as:

```
Enter n value :
```

functions

For example, if the user gives the input as:

```
Enter n value : 3
```

Next, the program should print the message on the console as:

```
Enter 3 elements :
```

if the user gives the input as:

```
Enter 3 elements : 45 67 34
```

then the program should print the result as:

```
Elements before sorting : 45 67 34 Elements after sorting : 67 45 34
```

Note: Write the functions read(), bubbleSort() and display() in sorta.c.

Source Code:

```
<u>sort.c</u>
```

```
#include<stdio.h>
void bubbleSort(int [],int);
void read(int [],int);
void display(int[],int);
void main()
   int a[20],n,i;
   printf("Enter n value : ");
   scanf("%d",&n);
   read(a,n);
   printf("Elements before sorting : ");
   display(a,n);
   bubbleSort(a,n);
   printf("Elements after sorting : ");
   display(a,n);
void read(int a[],int n)
   int i;
   printf("Enter %d elements : ",n);
   for(i=0;i<n;i++)
   scanf("%d",&a[i]);
void display(int a[],int n)
```

```
{
   int i;
   for(i=0;i<n;i++)</pre>
   printf("%d ",a[i]);
   printf("\n");
}
void bubbleSort(int a[],int n)
   int i,j,temp;
   for(i=0;i<n-1;i++)</pre>
      for(j=i+1;j<n;j++)</pre>
          if(a[j]>a[i])
             temp=a[i];
             a[i]=a[j];
             a[j]=temp;
          }
      }
   }
}
```

sorta.c

#include<stdio.h>

Execution Results - All test cases have succeeded!

```
Test Case - 1
User Output
Enter n value : 3
Enter 3 elements : 4 6 8
Elements before sorting: 4 6 8
Elements after sorting : 8 6 4
```

```
Test Case - 2
User Output
Enter n value : 5
Enter 5 elements : 34 56 71 26 17
Elements before sorting : 34 56 71 26 17
Elements after sorting : 71 56 34 26 17
```