Ex. No. 10c **Bubble Sort**

Date:

**Aim**

To sort an array of N numbers using Bubble sort

**Algorithm**

1. Start

2. Read number of array elements n

3. Read array elements Ai

4. Index i varies from 0 to n-2

5. Index j varies from i+1 to n-1

6. Traverse the array and compare each pair of elements If Ai > Aj then Swap Ai and A

7. Stop

**Program**

/\* Bubble Sort \*/

#include <stdio.h>

#include <stdlib.h>

void main()

{

int a[50],i, j, n, t;

system("clear");

printf("Enter number of elements : ");

scanf("%d", &n);

printf("Enter Array Elements \n");

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

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

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

{

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

{

if (a[i] > a[j])

{

t = a[i];

a[i] = a[j];

a[j] = t;

}

}

}

printf("\n Elements in Sorted order :");

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

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

}

**Output**

**Result**

Thus an array was sorted using bubble sort.