KIDUS ABEBE MEKONEN
Roll No- 2106285
Section A11
IT department

Class 11 April Lab questions

#1. Bubble sort

Code:

```c
#include <stdio.h>
#include <stdlib.h>
int main()
{
 int a_285[30],n_285,i_285,j_285,temp_285,sorted_285;
 printf("how many numbers do you want?=>");
 scanf("%d",&n_285);
 if(n_285>30)
 {
     printf("Too many numbers!");
     exit(0);
 }
 printf("Please provide the array elements=>");
 for(i_285=0;i_285<n_285;i_285++)
 {
     scanf("%d",&a_285[i_285]);
 }
 for(i_285=0; i_285<n_285-1 && sorted_285==0; i_285++)
 {
     sorted_285=1;
     for(j_285=0; j_285<(n_285-i_285)-1;j_285++)
     if(a_285[j_285]>a_285[j_285+1])
     {
         temp_285 = a_285[j_285];
         a_285[j_285]=a_285[j_285+1];
         a_285[j_285+1]=temp_285;
         sorted_285=0;
     }
 }
 printf("The numbers in a sorted form are>>\n");
 for(i_285=0;i_285<n_285;i_285++)
 {
    printf("\n %d",a_285[i_285]);
 }
 return 0;
}
```

Output:

```
PROBLEMS  OUTPUT  TERMINAL

TERMINAL
PS C:\Users\KIIT\Desktop\Programming\11 april_bubble sort and binary search> gcc bubble_sort.c
PS C:\Users\KIIT\Desktop\Programming\11 april_bubble sort and binary search> ./a.exe
how many numbers do you want?=>5
Please provide the array elements=>23 43 75 2 3
The numbers in a sorted form are>>

 2
 3
 23
 43
 75
PS C:\Users\KIIT\Desktop\Programming\11 april_bubble sort and binary search>
```

KIDUS ABEBE MEKONEN
Roll No- 2106285
Section A11
IT department

```
PS C:\Users\KIIT\Desktop\Programming\11 april_bubble sort and binary search> ./a.exe
how many numbers do you want?=>6
Please provide the array elements=>13 43 12 12 3 5 5
The numbers in a sorted form are>>

 3
 5
 12
 12
 13
 43
PS C:\Users\KIIT\Desktop\Programming\11 april_bubble sort and binary search>
```