1) Q) Write a C program to search for a key element using linear search.

2) Write a C program to sort the numbers using bubble sort.

①
```c
#include <stdio.h>
#include <stdlib.h>
void main()
{
    int a[10], key, n, i;
    printf("Enter the number of elements : ");
    scanf("%d", &n);
    printf("enter the elements : ");
    for(i=0; i<n; i++)
        scanf("%d", &a[i]);
    printf("enter the key element : ");
    scanf("%d", &key);
    for(i=0; i<n; i++)
    {
        if(key == a[i])
        {
            printf("the key is found at : %d", i);
            exit(0);
        }
    }
    printf("key not found");
}
```

Output : enter the number of elements : 5
          enter the elements : 1 2 3 4 5
          enter the key element : 2
          the key is found at : 1

(2)
```c
#include <stdio.h>
void main ()
{
    int a[10], n, temp, i, j;
    printf ("enter the number of elements : ");
    scanf ("%d", &n);
    printf ("enter the elements : ");
    for (i=0; i<n; i++)
    {
        scanf ("%d", &a[i]);
    }
    for (i=0; i<n; i++)
    {
        for (j=i+1; j<n; j++)
        {
            if (a[i] > a[j])
            {
                temp = a[i];
                a[i] = a[j];
                a[j] = temp;
            }
        }
    }
    printf ("the sorted elements are : ");
    for (i=0; i<n; i++)
        printf ("%d ", a[i]);
}
```

Output :-   enter the number of elements : 5
             enter the elements : 5 3 4 2 1
             the sorted elements are : 1 2 3 4 5