1. **write C program to sort N elements of the array using Bubble sorting technique.**

**#include <stdio.h>**

**Void main ()**

**{**

**int a[50], n, i, j, temp;**

**printf("Please Enter the number of Elements you want in the array: ");**

**scanf("%d", &n);**

**printf("Please Enter the Value of Elements: ");**

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

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

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

**{**

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

**{**

**if(a[j] > a[j + 1])**

**{**

**temp = a[j];**

**a[j] = a[j + 1];**

**a[j + 1] = temp;**

**}**

**}**

**}**

**printf("After implementing bubble sort: ");**

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

**{**

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

**}**

**return 0;**

**}**

1. **C program to implement Linear search.**

**#include <stdio.h>**

**void main()**

**{**

**int n, i,  key, flag = 0,arr[100];**

**printf("Enter number of elements you would like to take as input: ");**

**scanf("%d", &n);**

**printf("\nEnter all the elements of your choice:");**

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

**{**

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

**}**

**printf("\nEnter the key element that you would like to be searched: ");**

**scanf("%d", &key);**

**/\*  Linear search starts \*/**

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

**{**

**if (key == arr[i] )**

**{**

**flag= 1;**

**break;**

**}**

**}**

**if (flag == 1)**

**printf("we got the element at index %d",i+1);**

**else**

**printf("we haven’t got element at any index in the array\n");**

**getch();**

**}**