ECS-102 LAB TASK 8 – 1D Arrays Applications

Consider the sorted array in increasing manner of size 12 with each element placed as shown with the address written along with the elements. (For ques 1 to 3).

3	4	7	11	18	29	45	71	87	89	93	96
0	1	2	3	4	5	6	7	8	9	10	11

1. Write a program to search a number (Binary search) in an array and print that number with its location in the array.

[Hint: In the above array if we search for '66' and '71', then in case of '66' the print on the screen must be "Not an element of the array". While if you search for '71', then the print on the screen must be "71 is an element of an array and its position is 8th"]

2. Write a program to Insert a number in an array and print that number with its location in the array.

[Hint: In the above array insert number '66' where ever user wants and if the size is not greater than 12 it should print overflow]

3. Write a program to remove a number from an array.

[Hint: In the above array delete number '71' from this array and if the position is greater than size of the array print deletion is not possible.]

4. Write a program to find the smallest element of the array (Linear search) along with its position in the array shown below.

11	29	7	11	45	29	18	96	71	89	99	3
0	1	2	3	4	5	6	7	8	9	10	11

[Hint: In the above array the smallest element is '3' and its position is 11th]