

## Linear Search or Searching In an Array

It is an operation in which a given array can be searched for a particular value.

The location of the searched element is informed.

Eg An Array Series[N] we will search an element value 'x' and if it is found then its location is stored in pos.

\*\* If there is duplicate values in the Series[N] then position of last duplicate value will be printed.

Algo

- Steps:
1. C=1, Pos=0
  2. While (C ≤ N)  
Perform step 3 & 4
  3. if (Series[C] = 'x')  
Then pos = C
  4. C = C + 1
  5. Display pos
  6. End.

// Program searching in an array

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int Series[30];
    int C, Pos, x, n, i;
    printf("\n\n Enter the size of series");
    scanf("%d", &n);
    printf("\n Enter the elements of series");
    for (i=0; i<n; i++)
        scanf("%d", &Series[i]);
    printf("Enter the value to be searched");
    scanf("%d", &x);
    C = 0;
    Pos = -1;
    while (C < n)
    {
        if (Series[C] == x)
            Pos = C;
        C++;
    }
    if (Pos > -1)
```

Subscribe to our

**YouTube Channel**



Tutorialspoint.com  
A SIMPLE LEARNING

Computer Science Lectures By ER. Deepak Garg

```
{ printf( "\n The position of element from 0 position  
    =%d", Pos );  
}  
else  
    printf ( "\n No element found" );  
}  
// main function ends.
```

Subscribe to our

**You**  **Channel**



**TutorialsSpace.com**  
A SIMPLE LEARNING

**Computer Science Lectures By ER. Deepak Garg**