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**NPTEL** (<https://swayam.gov.in/explorer?ncCode=NPTEL>) » **Problem Solving Through Programming In C (course)**

## Week 9 : Programming Assignment 2

**Due on 2023-09-28, 23:59 IST**

Write a C program to search a given element from a 1D array and display the position at which it is found by using linear search function. The index location starts from 1.

**Your last recorded submission was on 2023-09-25, 21:56 IST**

Select the Language for this assignment. C ▾

```

1 #include <stdio.h>
2 int linear_search(int[], int, int);
3 int main()
4 {
5     int array[100], search, c, n, position;
6     /* search - element to search, c - counter, n - number of elements in
7     position - The position in which the element is first found in the list
8
9     scanf("%d", &n); // Number of elements in the array is read from the
10
11     for (c = 0; c < n; c++)
12         scanf("%d", &array[c]); //Elements of array is read from the test data
13
14     scanf("%d", &search); //Element to search is read from the test case
15
16     /* Use the following in the printf statement to print the output
17     printf("%d is not present in the array.", search);
18     printf("%d is present at location %d.", search, position+1); //As array index starts from 0
19     */
20
21     for (c = 0; c < n; c++)
22     {
23         if(array[c]==search)
24         {
25             printf("%d is present at location %d.",search,c+1);
26             return 0;
27         }
28     }
29     printf("%d is not present in the array.",search);
30     return 0;
31 }
```

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### Course outline

**How does an  
NPTEL  
online  
course  
work? ()**

**Week 0 : ()**

**Week 1 ()**

**Week 2 ()**

**Week 3 ()**

**Week 4 ()**

**Week 5 ()**

**Week 6 ()****Week 7 ()****Week 8 ()****Week 9 ()**

- ☐ Lecture 41:  
Substitution of # include and Macro (unit? unit=85&lesson=86)
- ☐ Lecture 42:  
"search" as a function (unit? unit=85&lesson=87)
- ☐ Lecture 43:  
Binary Search (unit? unit=85&lesson=88)
- ☐ Lecture 44:  
Binary Search (Contd.) (unit? unit=85&lesson=89)
- ☐ Lecture 45:  
Sorting Methods (unit? unit=85&lesson=90)
- ☒ Quiz: Week 9 :  
Assignment 9 (assessment? name=260)
- ☒ Week 9 :  
Programming Assignment 1 (/noc23\_cs121/progassignment? name=262)
- ☒ **Week 9 :  
Programming Assignment 2**

You may submit any number of times before the due date. The final submission will be considered for grading.

**This assignment has Public Test cases. Please click on "Compile & Run" button to see the status of Public test cases. Assignment will be evaluated only after submitting using Submit button below. If you only save as or compile and run the Program , your assignment will not be graded and you will not see your score after the deadline.**

Save as DraftCompile & RunSubmitReset**Sample Test Cases**

	Input	Output
Test Case 1	5 78 90 34 54 98 90	90 is present at location 2.
Test Case 2	6 30 40 50 20 90 60 90	90 is present at location 5.

**(/noc23\_cs121/progassignment?name=263)**

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☒ Week 9 :  
Programming  
Assignment 3  
(/noc23\_cs121/progassignment?name=264)

☒ Week 9 :  
Programming  
Assignment 4  
(/noc23\_cs121/progassignment?name=265)

☐ Feedback  
Form of Week  
9 (unit?  
unit=85&lesson=266)

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**Week 10 ()**

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**DOWNLOAD  
VIDEOS ()**

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**Books ()**

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**Text  
Transcripts ()**

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**Problem  
Solving  
Session -  
July 2023 ()**