Week-09 Program-01

Write a program to print all the locations at which a particular element (taken as input) is found in a list and also print the total number of times it occurs in the list. The location starts from 1. For example if there are 4 elements in the array

5
6
5
7

If the element to search is 5 then the output will be

5 is present at location 1
5 is present at location 3
5 is present 2 times in the array.

Sample Test Cases

<table>
<thead>
<tr>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td></td>
</tr>
<tr>
<td>90</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

Test Case 1

30 is present at location 1.
30 is present at location 4.
30 is present at location 6.
30 is present at location 7.
30 is present 4 times in the array.
# include and Macro (unit? unit=10&lesson=55)

Lecture 42: "search" as a function (unit? unit=10&lesson=56)

Lecture 43: Binary Search (unit? unit=10&lesson=57)

Lecture 44: Binary Search (Contd.) (unit? unit=10&lesson=58)

Lecture 45: Sorting Methods (unit? unit=10&lesson=59)

Quiz: Assignment 9 (assessment? name=150)

Week-09 Program-01 (/noc20_cs06/progassignment? name=151)

Week-09 Program-02 (/noc20_cs06/progassignment? name=152)

Week-09 Program-03 (/noc20_cs06/progassignment? name=153)

Week-09 Program-04 (/noc20_cs06/progassignment? name=154)

Feedback For Week 9 (unit? unit=10&lesson=168)

Week 10

Week 11

Week 12

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Sample solutions (Provided by instructor)

```c
#include <stdio.h>

int main()
{
    int array[100], search, n, count = 0;
    //"search" is the key element to search and 'n' is the total number
    //"count" is to store total number of elements
    scanf("%d", &n); //Number of elements is taken from test case
    int c;
    for (c = 0; c < n; c++)
        scanf("%d", &array[c]);
    scanf("%d", &search); // The element to search is taken from test case

    /* Use the printf statements as below:
    "%d is present at location %d\n" for each locations
    "%d is not present in the array\n" if the element is not found in the
    "%d is present %d times in the array\n"
    */
    for (c = 0; c < n; c++)
    {
        if (array[c] == search)
        {
            printf("%d is present at location %d\n", search, c+1);
            count++;
        }
        if (count == 0)
            printf("%d is not present in the array\n", search); 
        else
            printf("%d is present %d times in the array\n", search, count);
    }
    return 0;
}
```

Test Case 2

80 is not present in the array.

Test Case 3

5 is present at location 1.
5 is present at location 3.
5 is present 2 times in the array.

Test Case 4

50 is not present in the array.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37