



2-Finding Duplicates- $O(n)$ Time Complexity, $O(1)$ Space Complexity

Started on Friday, 10 October 2025, 2:31 PM

State Finished

Completed on Friday, 10 October 2025, 2:34 PM

Time taken 2 mins 4 secs

Marks 1.00/1.00

Grade 4.00 out of 4.00 (100%)

Question 1 | Correct Mark 1.00 out of 1.00 [Flag question](#)

Find Duplicate in Array.

Given a read only array of n integers between 1 and n , find one number that repeats.

Input Format:

First Line - Number of elements

n Lines - n Elements

Output Format:

Output Format:

Element x - That is repeated

For example:

Input	Result
5 1 1 2 3 4	1

Answer: (penalty regime: 0 %)

```
1 #include <stdio.h>
2
3 int main() {
4     int n;
5     scanf("%d", &n);
6
7     int arr[n + 1];
8     int freq[n + 1];
9
10
11     for (int i = 0; i <= n; i++)
12         freq[i] = 0;
13
14
15     for (int i = 0; i < n; i++) {
16         scanf("%d", &arr[i]);
17         freq[arr[i]]++;
18
19         if (freq[arr[i]] > 1) {
20             printf("%d\n", arr[i]);
21             return 0;
22         }
23     }
24
25     return 0;
26 }
27
```

	Input	Expected	Got	
✓	11	7	7	✓

	10 9 7 6 5 1 2 3 8 4 7			
✓	5 1 2 3 4 4	4	4	✓
✓	5 1 1 2 3 4	1	1	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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