

KARTHIK J 2024-IT ▾

K2

**Started on** Wednesday, 8 October 2025, 2:01 PM**State** Finished**Completed on** Wednesday, 8 October 2025, 2:04 PM**Time taken** 3 mins 47 secs**Marks** 1.00/1.00**Grade** **4.00** out of 4.00 (100%)

**Question 1** | Correct Mark 1.00 out of 1.00

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:

Element x - That is repeated

**For example:**

Input	Result
5	1
1 1 2 3 4	

**Answer:** (penalty regime: 0 %)

```

1 #include <stdio.h>
2
3 int findDuplicate(int arr[], int n) {
4     int slow = arr[0];
5     int fast = arr[0];
6     do {
7         slow = arr[slow];
8         fast = arr[arr[fast]];
9     } while (slow != fast);
10    slow = arr[0];
11    while (slow != fast) {
12        slow = arr[slow];
13        fast = arr[fast];
14    }
15
16    return slow;
17 }
18
19 int main() {
20     int n;
21     scanf("%d", &n);
22
23     int arr[n];
24     for (int i = 0; i < n; i++)
25         scanf("%d", &arr[i]);
26
27     int duplicate = findDuplicate(arr, n);
28     printf("%d\n", duplicate);
29
30     return 0;
31 }
32

```

	Input	Expected	Got	
✓	11 10 9 7 6 5 1 2 3 8 4 7	7	7	✓

	Input	Expected	Got	
✓	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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