

CHANDRU G S 2024-CSE ▾**C2****Started on** Wednesday, 22 October 2025, 8:25 PM**State** Finished**Completed on** Sunday, 16 November 2025, 9:01 PM**Time taken** 25 days**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 nums[], int n) {
4     int slow = nums[0];
5     int fast = nums[0];
6
7     do {
8         slow = nums[slow];
9         fast = nums[nums[fast]];
10    } while (slow != fast);
11
12    slow = nums[0];
13    while (slow != fast) {
14        slow = nums[slow];
15        fast = nums[fast];
16    }
17
18    return slow;
19}
20
21 int main() {
22     int n;
23     scanf("%d", &n);
24
25     int nums[n];
26     for (int i = 0; i < n; i++) {
27         scanf("%d", &nums[i]);
28     }
29
30     int duplicate = findDuplicate(nums, n);
31     printf("%d", duplicate);
32
33     return 0;
34}
35

```

	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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