



Started on	Tuesday, 18 November 2025, 11:08 AM
State	Finished
Completed on	Tuesday, 18 November 2025, 11:09 AM
Time taken	23 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 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 A[n];
8      for(int i = 0; i < n; i++)
9          scanf("%d", &A[i]);
10
11
12     int slow = A[0];
13     int fast = A[A[0]];
14
15     while(slow != fast) {
16         slow = A[slow];
17         fast = A[A[fast]];
18     }
19
20     slow = 0;
21     while(slow != fast) {
22         slow = A[slow];
23         fast = A[fast];
24     }
25
26     printf("%d\n", slow);
27     return 0;
28 }
29

```

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