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Started on	Tuesday, 27 August 2024, 2:37 PM
State	Finished
Completed on	Tuesday, 27 August 2024, 2:44 PM
Time taken	7 mins 11 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 #include<stdlib.h>
3 int main(){
4     int n,e;
5     scanf("%d",&n);
6     int a[n];
7     for(int i=0;i<n;i++){
8         scanf("%d",&e);
9         a[i]=e;
10    }
11    int b=-1;
12    for(int i=0;i<n;i++){
13        int d=abs(a[i]);
14        if(a[d]<0){
15            b=d;
16            break;
17        }
18        else{
19            a[d]=-a[d];
20        }
21    }
22    if(b!=-1){
23        printf("%d",b);
24    }
25
26
27

```

	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.

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

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