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Started on	Monday, 19 August 2024, 10:45 AM
State	Finished
Completed on	Monday, 19 August 2024, 11:51 AM
Time taken	1 hour 5 mins
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  int rep(int arr[], int n) {
3      int res=0;
4      for (int i=0;i<n;i++) {
5          res^=arr[i];
6      }
7      for (int i=0;i<n;i++) {
8          res^=i;
9      }
10     return res;
11 }
12 int main(){
13     int n;
14     scanf("%d",&n);
15     int arr[n];
16     for (int i=0;i<n;i++) {
17         scanf("%d",&arr[i]);
18     }
19     printf("%d",rep(arr,n));
20     return 0;
21 }
22
23 /*#include<stdio.h>
24 int rep(int arr[],int n) {
25     int res=0;
26     for(int i=0; i<n; i++){
27         res^=arr[i];
28     }
29     for(int i=0; i<n-1;i++){
30         res^=i;
31     }
32     return res; //This is the repeating
33 }
34 int main() {
35     int n;
36     scanf("%d",&n);
37     int arr[n];
38     for(int i=0;i<n;i++)
39         scanf("%d",&arr[i]);
40     printf("%d",rep(arr,n));
41     return 0;
42 }
43 */
44 /*
45 #include<stdio.h>
46 int dup(int arr[],int n){
47     for(int i=0;i<n;i++){
48         scanf("%d",&arr[i]);
49         for(int j=0;j<i;j++){
50             if(arr[j]==arr[i])
51                 return arr[i];
52         }

```

	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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[3-Print Intersection of 2 sorted arrays-O\(m*n\)Time Complexity,O\(1\) Space Complexity ▶](#)