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Started on	Tuesday, 27 August 2024, 1:38 PM
State	Finished
Completed on	Tuesday, 27 August 2024, 2:06 PM
Time taken	28 mins 10 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 %)

```c
#include <stdio.h>
int f(int arr[], int n) {
  int b=arr[0];
  int c=arr[0];
  do {
    b = arr[b];
    c= arr[arr[c]];
  } while (b!=c);
  b= arr[0];
  while (b!= c) {
    b= arr[b];
    c= arr[c];
  }
  return b;
}
int main() {
  int n;
  scanf("%d", &n);
  int arr[n];
  for (int i = 0; i < n; i++) {
    scanf("%d", &arr[i]);
  }
  int d=f(arr, n);
  printf("%d\n", d);
  return 0;
}
```

	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.

◄ 4-DP-Longest non-decreasing Subsequence

Jump to...

2-Finding Duplicates-O(n) Time Complexity,O(1) Space Complexity ►

◄ 4-DP-Longest non-decreasing Subsequence

2-Finding Duplicates-O(n) Time Complexity,O(1) Space Complexity ►