Started on	Tuesday, 8 October 2024, 1:45 PM
State	Finished
Completed on	Tuesday, 8 October 2024, 1:45 PM
Time taken	15 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 ►