Started on	Tuesday, 27 August 2024, 2:11 PM
State	Finished
Completed on	Tuesday, 1 October 2024, 11:40 AM
Time taken	34 days 21 hours
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 %)

```
#include <stdio.h>

int f(int arr[], int n) {
  int s = arr[0];
  int fa= arr[0];
  do {
    s = arr[s];
    fa= arr[arr[fa]];
  } while (s != fa);
  s= arr[0];
  while (s!= fa) {
    s= arr[s];
    fa= arr[fa];
  }
  return s;
}
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.

◄ 5-Implementation of Quick Sort

Jump to...

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