

## 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 f(int arr[], int n) {
3      int a=arr[0];
4      int b= arr[0];
5      do {
6          a= arr[a];
7          b= arr[arr[b]];
8      } while (a!=b);
9      a= arr[0];
10     while (a!=b) {
11         a= arr[a];
12         b= arr[b];
13     }
14     return a;
15 }
16 int main() {
17     int n;
18     scanf("%d", &n);
19     int arr[n];
20     for (int i=0; i<n;i++) {
21         scanf("%d", &arr[i]);
22     }
23     int d = f(arr, n);
24     printf("%d\n", d);
25     return 0;
26 }
```

	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.