Sansa and XOR

by amititkgp

Problem Submissions Leaderboard Discussions Editorial

Sansa has an array. She wants to find the value obtained by XOR-ing the contiguous subarrays, followed by XOR-ing the values thus obtained. Can you help her in this task?

Note : $[5, 7, 5]$ is contiguous subarray of $[4, 5, 7, 5]$ while $[4, 7, 5]$ is not.

Input Format

First line contains an integer T, number of the test cases.
The first line of each test case contains an integer N, number of elements in the array.
The second line of each test case contains N integers that are elements of the array.

Constraints

$1 \leq T \leq 5$
$2 \leq N \leq 10^5$
$1 \leq \text{numbers in array} \leq 10^8$

Output Format

Print the answer corresponding to each test case in a separate line.

Sample Input

```
2
3
1 2 3
4
4 5 7 5
```

Sample Output

```
2
0
```

Explanation

Test case #00:
$1 \oplus 2 \oplus 3 \oplus (1 \oplus 2) \oplus (2 \oplus 3) \oplus (1 \oplus 2 \oplus 3) = 2$

Test case #01:
$4 \oplus 5 \oplus 7 \oplus 5 \oplus (4 \oplus 5) \oplus (5 \oplus 7) \oplus (7 \oplus 5) \oplus (4 \oplus 5 \oplus 7) \oplus (5 \oplus 7 \oplus 5) \oplus (4 \oplus 5 \oplus 7 \oplus 5) = 0$

Submissions:13281

Max Score:30

Difficulty: Medium

Rate This Challenge:

More

Current Buffer (saved locally, editable)

Java 7

```
1  import java.io.*;
2  import java.util.*;
3  import java.text.*;
4  import java.math.*;
5  import java.util.regex.*;
6
7  public class Solution {
8
9      public static void main(String[] args) {
10         /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should be named Solution. */
11     }
12 }
```

Line: 1 Col: 1

Upload Code as File

Test against custom input

Run Code

Submit Code