Sansa and XOR

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. Determine this value.

Example

$arr = [3, 4, 5]$

Subarray	Operation	Result
3	None	3
4	None	4
5	None	5
3,4	3 XOR 4	7
4,5	4 XOR 5	1
3,4,5	3 XOR 4 XOR 5	2

Now we take the resultant values and XOR them together:

$3 \oplus 4 \oplus 5 \oplus 7 \oplus 1 \oplus 2 = 6$. Return 6.

Function Description

Complete the sansaXor function in the editor below.

sansaXor has the following parameter(s):

- int arr[n]: an array of integers

Returns

- int: the result of calculations

Input Format

The first line contains an integer t, the number of the test cases.

Each of the next t pairs of lines is as follows:

- The first line of each test case contains an integer n, the number of elements in arr.

- The second line of each test case contains n space-separated integers $arr[i]$.

Constraints

$1 \leq t \leq 5$

$2 \leq n \leq 10^5$

$1 \leq arr[i] \leq 10^8$

Sample Input

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

Sample Output

```
2
0
```

Explanation

Test case #00:

$1 \oplus 2 \oplus 3 \oplus (1 \oplus 2) \oplus (2 \oplus 3) \oplus (1 \oplus 2 \oplus 3) = 2$

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Difficulty Medium

Max Score 100

Submitted By 3878

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Test case #01:

$4 \oplus 5 \oplus 7 \oplus 5 \oplus (4 \oplus 5) \oplus (5 \oplus 7) \oplus (7 \oplus 5) \oplus (4 \oplus 5 \oplus 7) \oplus (5 \oplus 7 \oplus 5) \oplus (4 \oplus 5 \oplus 7 \oplus 5) = 0$

Change Theme Language C++11

```
#include <bits/stdc++.h>

using namespace std;

string ltrim(const string &);
string rtrim(const string &);
vector<string> split(const string &);

/*
 * Complete the 'sansaXor' function below.
 *
 * The function is expected to return an INTEGER.
 * The function accepts INTEGER_ARRAY arr as parameter.
 */

int sansaXor(vector<int> arr) {

}

int main()
{
    ofstream fout(getenv("OUTPUT_PATH"));

    string t_temp;
    getline(cin, t_temp);

    int t = stoi(ltrim(rtrim(t_temp)));

    for (int t_itr = 0; t_itr < t; t_itr++) {
        string n_temp;
        getline(cin, n_temp);

        int n = stoi(ltrim(rtrim(n_temp)));

        string arr_temp_temp;
        getline(cin, arr_temp_temp);
```

Line: 96 Col: 1

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