Problem Statement **Suggest Edit**

You are given an empty array initially and you need to return the updated array provided that some Q number of queries were performed on this array. The queries are of two types:

1. "1 val", For this type of query, you need to insert the integer 'val' to the end of the array.

2. "2 val", For this type of query, you need to take the bitwise XOR of all the elements of the array with 'val' i.e each element of the array will be updated as arr[i] = arr[i] ^ val (^ denotes the bitwise XOR operation).

Your task is to print the array after processing all the Q queries.

Note:

1) Bitwise XOR operation takes two numbers and performs XOR operation on every bit of those two numbers. For example, consider two numbers 2 and 3 their bitwise XOR will be 1. Because the binary representation of 2 is 10 and the binary representation of 3 is 11. And XOR of 10 and 11 will be 01(because XOR evaluates to 0 if the corresponding bits are the same in both the operands, otherwise it evaluates to 0.) which evaluates to 1.
2) The first query will always be a type 1 query.
3) Note that the ith query should be performed on the array obtained after performing (i-1)th query on the array and so on i.e the changes of each query are updated on the original array itself.

Input Format:

The first line of the input contains an integer Q denoting the number of queries. Then Q lines follow:

The first and the only line of each query contains two space-separated integers A and B, denoting the type of the query and the value for that query respectively.

For more clarity please refer to the sample input.

Output Format:

The only line of output of each test case consists of X space-separated integers, where X is the number of queries of the first type.

Note:

You do not need to print anything, it has already been taken care of. Just implement the given function.
The function consists of a vector of vectors as its parameter, such that each

vector determines a query. For example, if there are two queries like 1 5 and 2 4 then the vector of vectors passed as parameters will be like {{1,5},{2,4}}.

Constraints:

```
1 <= Q <= 10^5
1 <= val <= 10^9
Time Limit: 1sec
```

Sample Input 1:

```
2
1 3
2 2
```

Sample Output 1:

```
1
```

Explanation For Sample Input 1:

After the first query, 3 will be pushed into the array, so the array will be {3}, then after processing the second query the array will be changed to {3^2} i.e. {1}.

Sample Input 2:

```
3
1 2
2 3
2 1
```

Sample Output 2:

```
0
```

Explanation For Sample Input 2:

After the first query, 2 will be pushed into the array, so the array will be {2}, then after processing the second query the array will be changed to {2^3} i.e. {1}, further the array is modified as {1^1} i.e {0}, after processing the third query.