# 12_Meow (How many different breeds of cats)

***（本題沒有中文題本）***

***(25 points)***

## Statement

Today, you came to a cat village. There are $N$ cats in this village.
Each cat is very cute, and all the $N$ cats are very cleverly lined up in a row.

As we all know, there are $B$ breeds of cats in the world.
Breed of each cat from left to right in this village is $a_1, a_2, \ldots, a_N$.

Because you are a coder and cat lover who is very interested in cat breeds,
you may be curious about the following type of question:
given $K$ intervals, $[l_1, r_1], [l_2, r_2], \ldots, [l_K, r_K]$,
how many different breeds of cats which appear a positive even number times in the union (that is, if a cat appears in multiple intervals, it should be counted only once) of the $K$ intervals?

Now, give you $M$ such questions, can you answer all correctly?

## Input Format

The first line contains three positive integers
$N$, $B$ and $M$ --- the number of cats in this village, the number of breeds of cats in the world and the number of questions you need to answer.

The second line contains $N$ positive integers $a_1, a_2, \cdots, a_N$.

The following $M$ lines contain questions, one per line.
The first integer in the line is $K$, followed by $2 \times K$ integers
$l_1, r_1, l_2, r_2, \cdots, l_K, r_K$ in the same line.

## Output Format

Print $M$ lines. The $i$-th line contains one integer ---
the number of breeds of cats which appear a positive even number times in the given intervals.

## Constraints

- $1 \leq N, B, M \leq 10^5$
- $1 \leq a_i \leq B$
- $1 \leq K \leq 10^5$
- $1 \leq l_i, r_i \leq N$
- It is guaranteed that the sum of all $K$'s is not greater than $10^5$.

## Test Cases

## Input 1

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

## Output 1

```
0
0
1
1
1
```

# Illustrations

There are 5 cats of three breeds ($1$, $3$, $2$, $1$ and $2$) in this sample. An explanation of each question is shown below:

1. The first question contains $1$ interval - $[1, 2]$. All the breeds of cats in the union of all intervals from left to right is $1$ and $3$. Since no breeds of cats appear even times, the answer is 0.
2. The second question contains one interval - $[1, 3]$. All the breeds of cats in the union of all intervals from left to right are $1$, $3$, and $2$. Since no breeds of cats appear even times, the answer is 0.
3. The third question contains one interval - $[1, 4]$. All the breeds of cats in the union of all intervals from left to right are $1$, $3$, $2$, and $1$. Since only one breed ($1$) appears even times, the answer is 1.
4. The forth question contains two intervals - $[1, 2]$ and $[4, 5]$. All the breeds of cats in the union of all intervals from left to right are $1$, $3$, $1$, and $2$. Since only one breed ($1$) appears even times, the answer is 1.
5. The fifth question contains three intervals - $[1, 1]$, $[3, 3]$ and $[5, 5]$. All the breeds of cats in the union of all intervals from left to right are $1$, $2$, and $2$. Since only one breed ($1$) appears even times, the answer is 1.