

## 8512 XOR

Consider an array  $A$  with  $n$  elements. Each of its element is  $A[i]$  ( $1 \leq i \leq n$ ). Then gives two integers  $Q$ ,  $K$ , and  $Q$  queries follow. Each query, give you  $L$ ,  $R$ , you can get  $Z$  by the following rules.

To get  $Z$ , at first you need to choose some elements from  $A[L]$  to  $A[R]$ , we call them  $A[i_1]$ ,  $A[i_2]$ ,  $\dots$ ,  $A[i_t]$ , Then you can get number  $Z = K$  or  $(A[i_1], A[i_2], \dots, A[i_t])$ .

Please calculate the maximum  $Z$  for each query .

### Input

Several test cases.

First line an integer  $T$  ( $1 \leq T \leq 10$ ). Indicates the number of test cases.

Then  $T$  test cases follows. Each test case begins with three integer  $N$ ,  $Q$ ,  $K$  ( $1 \leq N \leq 10000, 1 \leq Q \leq 100000, 0 \leq K \leq 100000$ ). The next line has  $N$  integers indicate  $A[1]$  to  $A[N]$  ( $0 \leq A[i] \leq 10^8$ ). Then  $Q$  lines, each line two integer  $L$ ,  $R$  ( $1 \leq L \leq R \leq N$ ).

### Output

For each query, print the answer in a single line.

### Sample Input

```
1
530
12345
13
24
35
```

### Sample Output

```
3
7
7
```