AND xor OR

Problem Statements :

You are given an array A[] of N distinct elements. Let M1 and M2 be the smallest and the next smallest element in the interval [L, R] where 1<= L < R <=N.

$S_i = (((M1 \ and \ M2) \ xor \ (M1 \ or \ M2)) \ and \ (M1 \ xor \ M2))$.

Input Format :

First line contains integer t as number of test cases.

Each test case contains an integer k and string S separated by space.

Constraints :

`1 < N < 10^6`

`1< A_i < 10^9`

Output Format :

Print the value of maximum possible value of S_i.

Sample Input :

```
5
9 6 3 5 2
```

Sample Output :

```
15
```

Explanation :

Consider the interval [1, 2] the result will be maximum.

$(((9 \ and \ 6) \ xor \ (9 \ or \ 6)) \ and \ (9 \ xor \ 6)) = 15$

Time Limit :