

## B. Maximum Xor Secondary

time limit per test: 1 second  
memory limit per test: 256 megabytes  
input: standard input  
output: standard output

Bike loves looking for the second maximum element in the sequence. The second maximum element in the sequence of distinct numbers  $x_1, x_2, \dots, x_k$  ( $k > 1$ ) is such maximum element  $x_j$ , that the following inequality holds: .

The lucky number of the sequence of distinct positive integers  $x_1, x_2, \dots, x_k$  ( $k > 1$ ) is the number that is equal to the bitwise excluding OR of the maximum element of the sequence and the second maximum element of the sequence.

You've got a sequence of distinct positive integers  $s_1, s_2, \dots, s_n$  ( $n > 1$ ). Let's denote sequence  $s_l, s_{l+1}, \dots, s_r$  as  $s[l..r]$  ( $1 \leq l < r \leq n$ ). Your task is to find the maximum number among all lucky numbers of sequences  $s[l..r]$ .

Note that as all numbers in sequence  $s$  are distinct, all the given definitions make sense.

### Input

The first line contains integer  $n$  ( $1 < n \leq 10^5$ ). The second line contains  $n$  distinct integers  $s_1, s_2, \dots, s_n$  ( $1 \leq s_i \leq 10^9$ ).

### Output

Print a single integer — the maximum lucky number among all lucky numbers of sequences  $s[l..r]$ .

### Examples

input
5 5 2 1 4 3
output
7

input
5 9 8 3 5 7
output
15

### Note

For the first sample you can choose  $s[4..5] = \{4, 3\}$  and its lucky number is  $(4 \text{ xor } 3) = 7$ . You can also choose  $s[1..2]$ .

For the second sample you must choose  $s[2..5] = \{8, 3, 5, 7\}$ .