D. 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 $x_1, x_2, ..., x_k\ (k > 1)$ is such maximum element x_j, that the following inequality holds: .

The lucky number of the sequence of distinct positive integers $x_1, x_2, ..., x_k\ (k > 1)$ 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 $s_1, s_2, ..., s_n\ (n > 1)$. Let's denote sequence $s_l, s_{l+1}, ..., s_r$ as $s[l..r]$ $(1 \le l < r \le n)$. 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 sence.

Input

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

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 $(4\ xor\ 3) = 7$. You can also choose $s[1..2]$.

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