275. To xor or not to xor

time limit per test: 0.25 sec.
memory limit per test: 65536 KB
input: standard
output: standard

The sequence of non-negative integers A1, A2, ..., AN is given. You are to find some subsequence Ai_1, Ai_2, ..., Ai_k (1 <= i_1 < i_2 < ... < i_k <= N) such, that Ai_1 XOR Ai_2 XOR ... XOR Ai_k has a maximum value.

Input
The first line of the input file contains the integer number N (1 <= N <= 100). The second line contains the sequence A1, A2, ..., AN (0 <= Ai <= 10^18).

Output
Write to the output file a single integer number -- the maximum possible value of Ai_1 XOR Ai_2 XOR ... XOR Ai_k.

Sample test(s)

Input

```
3
11 9 5
```

Output

```
14
```

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