

PROBLEMS SUBMIT STATUS STANDINGS CUSTOM TEST

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 A_1, A_2, \dots, A_N is given. You are to find some subsequence $A_{i_1}, A_{i_2}, \dots, A_{i_k}$ ($1 \leq i_1 < i_2 < \dots < i_k \leq N$) such, that $A_{i_1} \text{ XOR } A_{i_2} \text{ XOR } \dots \text{ XOR } A_{i_k}$ has a maximum value.

Input

The first line of the input file contains the integer number N ($1 \leq N \leq 100$). The second line contains the sequence A_1, A_2, \dots, A_N ($0 \leq A_i \leq 10^{18}$).

Output

Write to the output file a single integer number -- the maximum possible value of $A_{i_1} \text{ XOR } A_{i_2} \text{ XOR } \dots \text{ XOR } A_{i_k}$.

Sample test(s)

Input

3
11 9 5

Output

14

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Date:	Saratov, October 7, 2004

acmsguru

Finished

Practice

→ Submit?

Language: GNU G++20 13.2 (64 bit, win

Choose file: Choose File No file chosen

Submit

→ Last submissions

Submission	Time	Verdict
237468801	Dec/16/2023 17:30	Accepted
236124910	Dec/07/2023 01:32	Accepted

→ Problem tags

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No tag edit access

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