# Problem F
## Double Up

A Double Up game consists of a sequence of $n$ numbers $a_1, \ldots, a_n$, where each $a_i$ is a power of two. In one move one can either remove one of the numbers, or merge two identical adjacent numbers into a single number of twice the value. For example, for sequence $4, 2, 2, 1, 8$, we can merge the $2$s and obtain $4, 4, 1, 8$, then merge the $4$s and obtain $8, 1, 8$, then remove the $1$, and, finally, merge the $8$s, obtaining a single final number, $16$. We play the game until a single number remains. What is the largest number we can obtain?

### Input

The input consists of two lines. The first line contains $n$ ($1 \leq n \leq 1000$). The second line contains numbers $a_1, \ldots, a_n$, where $1 \leq a_i \leq 2^{100}$ for each $i$.

### Output

The ouput consists of a single line containing the largest number that can be obtained from the input sequence $a_1, \ldots, a_n$.

| Sample Input 1 | Sample Output 1 |
|---|---|
| 5<br>4 2 2 1 8 | 16 |

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