

2946 - Inverting the Parity

Description

You will be given a list of integer numbers between 1 and 10^5 . The task is simple: you must change the parity of the numbers in the following way:

- If original number is odd, you must multiply by two until you reach an even result.
- Otherwise if original number is even, you must divide (integer division) by two until you reach an odd result.

Print the result for each number after changing their parity.

Input specification

The first line contains an integer number $1 \leq T \leq 10^4$, the amount of numbers in the given list. The following T lines contain an integer number N between 1 and 10^5 , the i -th number in the given list.

Output specification

Print the result for each number after changing their parity, one per line, in the given order.

Sample input

```
5
10
7
13
16
9
```

Sample output

```
5
14
26
1
18
```

Hint(s)