

## Even vs Odd Divisors

Given an integer  $N$ , let

- $f(N)$  denote the number of even divisors of  $N$
- $g(N)$  denote the number of odd divisors of  $N$ .

For example, the divisors of 6 are 1, 2, 3 and 6.  $f(N) = 2$ ,  $g(N) = 2$  as there are 2 even and 2 odd numbers in this list.

Find whether  $f(N) > g(N)$  or  $f(N) = g(N)$  or  $f(N) < g(N)$ .

Output

- 1 if  $f(N) > g(N)$
- 0 if  $f(N) = g(N)$
- -1 if  $f(N) < g(N)$

## Input Format

- The first line of input will contain a single integer  $T$ , denoting the number of test cases.
- Each test case consists of multiple lines of input.
  - The first line consists of a single integer  $N$ .

## Output Format

For each test case, output on a new line :

- 1 if  $f(N) > g(N)$
- 0 if  $f(N) = g(N)$
- -1 if  $f(N) < g(N)$

## Constraints

- $1 \leq T \leq 100$
- $1 \leq N \leq 100$

## Sample 1:

Input	Output
6	-1
1	0
2	-1
3	1
4	-1
5	0
6	

## Explanation:

**Test Case 1** : 1 has only 1 divisor, which is odd. Hence  $f(1) = 0$ ,  $g(1) = 1$ , and we can see  $f(1) < g(1)$ .

**Test Case 2** : 2 has 2 factors - 1 and 2. Hence,  $f(2) = 1$ ,  $g(2) = 1$  and we see  $f(2) = g(2)$ .