Problem C. Sherlock and Divisors

OS Linux

Watson gives an integer N to Sherlock and asks him: What is the number of divisors of N that are divisible by `2` ?.

Input Format
First line contains T, the number of testcases. This is followed by T lines each containing an integer N.

Output Format
For each testcase, print the required answer in one line.

Constraints
$1 \leq T \leq 100$
$1 \leq N \leq 10^9$

Sample Input

```
2
9
8
```

Sample Output

```
0
3
```

Explanation
9 has three divisors 1, 3 and 9 none of which is divisible by 2.
8 has four divisors 1,2,4 and 8, out of which three are divisible by 2.