

Sherlock and Divisors

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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.