# **HackerRank**

# Project Euler #1: Multiples of 3 and 5

This problem is a programming version of Problem 1 from projecteuler.net

If we list all the natural numbers below 10 that are multiples of 3 or 5, we get 3, 5, 6 and 9. The sum of these multiples is 23.

Find the sum of all the multiples of  ${f 3}$  or  ${f 5}$  below  ${m N}.$ 

#### **Input Format**

First line contains T that denotes the number of test cases. This is followed by T lines, each containing an integer, N.

#### **Constraints**

- $1 \leqslant T \leqslant 10^5$
- $1 \le N \le 10^9$

#### **Output Format**

For each test case, print an integer that denotes the sum of all the multiples of  ${f 3}$  or  ${f 5}$  below N.

# Sample Input 0

```
2
10
100
```

# Sample Output 0

```
23
2318
```

# **Explanation 0**

For N=10, if we list all the natural numbers below 10 that are multiples of 3 or 5, we get 3,5,6 and 9. The sum of these multiples is 23.

Similarly for N=100, we get 2318.