

# Playing with GCD

Tanmoy recently learn about euclid gcd algorithm.

This algorithm looks like:

gcd(a,b):

```
if(b==0):return a
```

```
return gcd(b,a%b)
```

Now he want to find out how many pair (x,y) can be possible in range N, which gcd is greater than 1. Here pair (x,y) and (y,x) consider as same pair.  $1 \leq x, y \leq N$ .

He can find out it small number easily but for a large number its really hard to find out. Now he needs your help. Write a programme that find out number of such pair.

## Input:

Input start with an integer number  $T (\leq 10^5)$ , which is number of test cases.

Each test case contain a integer N ( $1 \leq N \leq 10^5$ ).

## Output:

For each case, Print case Number and Desired answer

## Sample:

Input	Output
2	
3	Case 1: 2
4	Case 2: 4

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