Project Euler #77: Prime summations

This problem is a programming version of Problem 77 from projecteuler.net

It is possible to write ten as the sum of primes in exactly five different ways:

$$7 + 3$$
$$5 + 5$$
$$5 + 3 + 2$$
$$3 + 3 + 2 + 2$$
$$2 + 2 + 2 + 2 + 2$$

You are given N, in how many ways can N be written as sum of 1 or more primes?

Input Format

First line of the input contains T, which is number of testcases.
Each testcase contains N.

Constraints

$1 \leq T \leq 100$
$2 \leq N \leq 1000$

Output Format

Print the output corresponding to each testcase on a new line.

Sample Input

```
2
5
10
```

Sample Output

```
2
5
```