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: $$\begin{align} &7 + 3 \\ &5 + 5 \\ &5 + 3 + 2 \\ &3 + 3 + 2 + 2 \\ &2 + 2 + 2 + 2 + 2 \end{align}$$

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

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

Sample Input

```
2
5
10
```

Sample Output

```
2
5
```