

# 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:

$$\begin{aligned}7 + 3 \\5 + 5 \\5 + 3 + 2 \\3 + 3 + 2 + 2 \\2 + 2 + 2 + 2 + 2\end{aligned}$$

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

$$\begin{aligned}1 \leq T \leq 100 \\2 \leq N \leq 1000\end{aligned}$$

## Output Format

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

## Sample Input

```
2
5
10
```

## Sample Output

```
2
5
```