

# Project Euler #50: Consecutive prime sum

This problem is a programming version of [Problem 50](#) from [projecteuler.net](#)

The prime **41**, can be written as the sum of six consecutive primes:

$$41 = 2 + 3 + 5 + 7 + 11 + 13$$

This is the longest sum of consecutive primes that adds to a prime below one-hundred.

The longest sum of consecutive primes below one-thousand that adds to a prime, contains **21** terms, and is equal to **953**.

Which prime,  $\leq N$ , can be written as the sum of the most consecutive primes?

**Note:** You have to print prime as well as the length of consecutive chain whose sum is prime. If such primes are more than 1, print the least.

## Input Format

The first line contains an integer  $T$ , i.e., number of test cases.

Next  $T$  lines will contain an integer  $N$ .

## Constraints

$$1 \leq T \leq 10$$

$$2 \leq N \leq 10^{12}$$

## Output Format

Print the values corresponding to each test case in a new line.

## Sample Input

```
2
100
1000
```

## Sample Output

```
41 6
953 21
```