

# Sum of two primes

Given a number  $N$  ( $3 \leq N \leq 1000000$ ) calculate all primes  $A$  and  $B$  with  $N=A+B$  and  $A \leq B$ . The output for  $N$  is the sum of all its  $A$  or 0 if no  $A$ - $B$ -pair was found.

## Input

In the first line the number  $T$  ( $\leq 100$ ) of tests, then  $T$  lines with one number  $N$ .

## Output

The above explained sum of all its  $A$  for each  $N$ .

## Example

### Input:

4  
3  
4  
10  
26

### Output:

0  
2  
8  
23