

## ASTU ICPC Club 2018

### Prob Primes

Time Limit 1sec

Memory Limit 256MB

Mustefa and Abenezer like to encrypt data. They have a simple encryption scheme. Given a number (which represents an 8-bit character), they encode it by replacing the number with the  $n$ th prime sum. The  $n$ th prime sum is the sum of all the prime numbers  $\leq$  the  $n$ th (0-indexed) prime number. The first 8  $n$ th prime sums are shown below.

$N$	0	1	2	3	4	5	6	7	..
$n$ <i>th Prime Number</i>	2	3	5	7	11	13	17	19	..
$n$ <i>th Prime Sum</i>	2	5	10	17	28	41	58	77	..

#### Input

The first line contains an integer  $T$  ( $1 \leq T \leq 100$ ),  $T$  being the number of test cases. In the next  $T$  lines,  
each line contains an integer  $n$  ( $0 \leq n \leq 255$ ).

#### Output

For each integer  $n$ , output the special code.

#### Sample Input

3  
0  
5  
7

#### Sample Output

2  
41  
77