

Sum of all prime numbers between 1 and N.

Given a positive integer N, calculate the sum of all prime numbers between 1 and N.

Input:

The first line of input contains an integer T denoting the number of test cases.
The first line of each test case is N.

Output:

Print the sum of all prime numbers between 1 and N.

Constraints:

$$1 \leq T \leq 50$$

$$1 \leq N \leq 1000000$$

Example:

Input:

2

5

10

Output:

10

17