

Question 1

Correct

Marked out of 10.00

Some prime numbers can be expressed as Sum of other consecutive prime numbers.

For example

$$5 = 2 + 3$$

$$17 = 2 + 3 + 5 + 7$$

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

Your task is to find out how many prime numbers which satisfy this property are present in the range 3 to N subject to a constraint that summation should always start with number 2.

Write code to find out number of prime numbers that satisfy the above mentioned property in a given range.

Input Format:

First line of input contains k - the number of inputs

The next k lines contains a number N.

Output Format:

Print the total number of all such prime numbers which are less than or equal to N.

Example:

Input:

k = 2

N = 20

N = 15

Output:

2 (there are 2 such numbers: 5 and 17)

1

For example:

Input	Result
2	2
20	1
15	

Answer: (penalty regime: 0 %)

```

1 for i in range(int(input())):
2     k=int(input())
3     prime=2
4     prime_list=[]
5     for num in range(3,k+1):
6         is_prime=True
7         for i in range(2,int(num**0.5)+1):
8             if num % i == 0:
9                 is_prime=False
10                break
11            if is_prime:
12                prime=prime+num
13                if prime>k:
14                    break
15                prime_list.append(prime)
16            for i in prime_list:
17                is_prime=True
18                for j in range(2,int(i**0.5)+1):
19                    if i % j ==0:
20                        prime_list.remove(i)
21                        break
22            print(len(prime_list))
23
24
25
26

```

20 |

	Input	Expected	Got	
✓	2	2	2	✓
	20	1	1	
	15			

Passed all tests! ✓