Assignment July 30, 2021

Question-1
Given an integer N, the task is to count the number of ways so that N can be written as the sum of a prime number and twice of a square, i.e. $N = 2*A^2 + P$, where P can be any prime number and A is any positive integer.

Input: N = 9
Output: 1
Explanation:
9 can be represented as sum of prime number and twice a square in only one way –
$N = 9 = 7 + 2*(1^2)$

Input: N = 15
Output: 2
Explanation:
15 can be represented as sum of prime number and twice a square in two ways –
$N = 15 = 7 + 2 * (2^2)$
$N = 15 = 13 + 2 * (1^2)$

Question-2
Given a large integer as a string str, the task is find the number of matchsticks required to represent it.
Input: str = “56”
Output: 11
Explanation: 5 sticks are required to represent 5 and 6 sticks are required to represent 6.