

2240. Number of Ways to Buy Pens and Pencils

Description

You are given an integer `total` indicating the amount of money you have. You are also given two integers `cost1` and `cost2` indicating the price of a pen and pencil respectively. You can spend **part or all** of your money to buy multiple quantities (or none) of each kind of writing utensil.

Return *the number of distinct ways you can buy some number of pens and pencils*.

Example 1:

Input: `total = 20, cost1 = 10, cost2 = 5`

Output: 9

Explanation: The price of a pen is 10 and the price of a pencil is 5.

- If you buy 0 pens, you can buy 0, 1, 2, 3, or 4 pencils.
- If you buy 1 pen, you can buy 0, 1, or 2 pencils.
- If you buy 2 pens, you cannot buy any pencils.

The total number of ways to buy pens and pencils is $5 + 3 + 1 = 9$.

Example 2:

Input: `total = 5, cost1 = 10, cost2 = 10`

Output: 1

Explanation: The price of both pens and pencils are 10, which cost more than total, so you cannot buy any writing utensils. Therefore, there is only 1 way: buy 0 pens and 0 pencils.

Constraints:

- $1 \leq \text{total}, \text{cost1}, \text{cost2} \leq 10^6$

