

### 6061. Number of Ways to Buy Pens and Pencils

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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. The

**Constraints:**

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

## JavaScript

```
1 const waysToBuyPensPencils = (total, pen, pencil) => {
2   let res = 0;
3   for (let x = 0; x * pen <= total; x++) {
4     let sum = total - x * pen;
5     let add = parseInt(sum / pencil);
6     res += add + 1;
7   }
8   return res;
9 };
```

☐ Custom Testcase

## Use Example Testcases

Run


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