

518. Coin Change II

Difficulty : Medium

<https://leetcode.com/problems/coin-change-ii>

You are given an integer array `coins` representing coins of different denominations and an integer `amount` representing a total amount of money.

Return *the number of combinations that make up that amount*. If that amount of money cannot be made up by any combination of the coins, return `0`.

You may assume that you have an infinite number of each kind of coin.

The answer is **guaranteed** to fit into a signed **32-bit** integer.

Example 1:

Input: `amount = 5, coins = [1,2,5]`

Output: `4`

Explanation: there are four ways to make up the amount:

`5=5`

`5=2+2+1`

`5=2+1+1+1`

`5=1+1+1+1+1`

Example 2:

Input: `amount = 3, coins = [2]`

Output: `0`

Explanation: the amount of 3 cannot be made up just with coins of 2.

Example 3:

Input: `amount = 10, coins = [10]`

Output: `1`

Constraints:

- `1 <= coins.length <= 300`
- `1 <= coins[i] <= 5000`
- All the values of `coins` are **unique**.
- `0 <= amount <= 5000`