

377. Combination Sum IV

Given an array of **distinct** integers `nums` and a target integer `target`, return *the number of possible combinations that add up to* `target`.

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

Example 1:

Input: `nums = [1,2,3]`, `target = 4`

Output: 7

Explanation:

The possible combination ways are:

(1, 1, 1, 1)

(1, 1, 2)

(1, 2, 1)

(1, 3)

(2, 1, 1)

(2, 2)

(3, 1)

Note that different sequences are counted as different combinations.

Example 2:

Input: `nums = [9]`, `target = 3`

Output: 0

```
class Solution:
    def combinationSum4(self, nums: List[int], target: int) -> int:
        dp = [0]*(target+1)
        dp[0]=1
        for i in range(1,len(dp)):
            for num in nums:
                if i-num>=0:
                    dp[i] = dp[i]+dp[i-num]
        return dp[target]
```