

Task 12: **Sum Game**

[400 points]

To pass time on Scarif, Stormtroopers play a game where they attempt to find the number of ways they can sum up a list of numbers so that the sum is equal to a certain value.



Problem Statement

Given a list of integers, find how many unique ways the integers can be added up to reach a specified sum. You may only use a specific value in your sum the number of times it appears in the input.

Input Format

The target sum value, followed by a comma separated list of N integers.

Input Constraints

- $0 < N < 5$

Output Format

A single integer that is the number of ways the list of numbers can be added up to the given sum.

Sample Input

```
4
2, 1, 3, 1
```

Sample Output

```
5 // (1+1+2), (1+2+1), (1+3), (2+1+1), (3+1)
```