Cashier problem ++

Given a set of coin values coins $\{c_1, c_2, \dots, c_k\}$ and a target sum of money m.
But how many ways can we form thesum m using these coins? Coins: $\{1,4,5\}$ and target sum: 5

Input:
The first line is the number of coin values, K. $1 \leq K \leq 10$
The second line consists of a set of coin values, coins $\{c_1, c_2, \dots, c_k\}$. $1 \leq c_i \leq 500$
The last line contains the target sum of money, m. $1 \leq m \leq 10^5$

Output:
Result

Example:
Input
3
1 4 5
5

Output
4

Explanation:
There are 4 ways in total:
1+1+1+1+1
1+4
4+1
5

**Note: 4+1 != 1+4*