

**CSES Problem Set****Coin Combinations II**TASK | [STATISTICS](#)**Time limit:** 1.00 s **Memory limit:** 512 MB

Consider a money system consisting of n coins. Each coin has a positive integer value. Your task is to calculate the number of distinct *ordered* ways you can produce a money sum x using the available coins.

For example, if the coins are $\{2, 3, 5\}$ and the desired sum is 9, there are 3 ways:

- $2 + 2 + 5$
- $3 + 3 + 3$
- $2 + 2 + 2 + 3$

Input

The first input line has two integers n and x : the number of coins and the desired sum of money.

The second line has n distinct integers c_1, c_2, \dots, c_n : the value of each coin.

Output

Print one integer: the number of ways modulo $10^9 + 7$.

Constraints

- $1 \leq n \leq 100$
- $1 \leq x \leq 10^6$
- $1 \leq c_i \leq 10^6$

Example

Input:

```
3 9
2 3 5
```

Output:

```
3
```

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