CPrime

Input file: standard input
Output file: standard output

Time limit: 1 second Memory limit: 256 megabytes

Mazen is facing a challenging problem and he requires your assistance.

To begin, let's establish the definition of prime factorization:

We denote the function P(x) as the product of the prime factors of a given number x, arranged in ascending order.

For instance: $P(10) = 2 \times 5$, and $P(12) = 2 \times 2 \times 3$.

Now, let's introduce the function S(x), which represents the sum of the prime factors of a given number x, also arranged in ascending order.

For instance: S(10) = 2 + 5 = 7, and S(12) = 2 + 2 + 3 = 7.

The problem involves having n distinct prime factors and a value m. Your task is to count the number of different numbers x for which S(x) = m and we can form x using some or all n distinct prime factors and we can use any of n factors any number of times.

Output the answer mod $10^9 + 7$.

Input

The first line contains n and m- $(1 \le n \le 100)$, $(1 \le m \le 10^6)$.

The second line contains n distinct prime factors a_{i} ($2 \le a_{i} \le 10^{6}$) sorted in ascending order.

Output

Only a single line Output the number of different numbers has S(x) = m

Output the answer mod $10^9 + 7$

Examples

standard input	standard output
3 7	2
2 3 5	
3 10	4
2 3 5	

Note

For the first test case m = 7 we have

$$S(10) = 2 + 5 = 7$$

$$S(12) = 2 + 2 + 3 = 7$$

so the answer = 2