# **P-sequences**

# HackerRank

We call a sequence of N natural numbers  $(a_1, a_2, ..., a_N)$  a *P*-sequence, if the product of any two adjacent numbers in it is not greater than *P*. In other words, if a sequence  $(a_1, a_2, ..., a_N)$  is a *P*-sequence, then  $a_i * a_{i+1} \le P \forall 1 \le i < N$ 

You are given N and P. Your task is to find the number of such *P*-sequences of N integers modulo  $10^9+7$ .

#### **Input Format**

The first line of input consists of  $\mathbb{N}$ The second line of the input consists of  $\mathbb{P}$ .

#### Constraints

 $2 \le N \le 10^3$  $1 \le P \le 10^9$  $1 \le a_i$ 

#### **Output Format**

Output the number of *P*-sequences of  $\mathbb{N}$  integers modulo  $10^9+7$ .

#### Sample Input 0

2 2

## Sample Output 0

3

## **Explanation 0**

3 such sequences are  $\{1,1\},\{1,2\}$  and  $\{2,1\}$