



C. PERMUTATION

Given a set A containing some number of integers ranging from 1 to 8. Consider the sequence consisting of n integers $[a_1; a_2; \dots; a_n]$, each chosen from set A .

We will call this sequence beautiful if for any number x , the elements of the sequence equal to x are at least x apart. That is, for any number x and for two indices $1 \leq i < j \leq n$, such that $a_i = a_j = x$, we always have $j - i \geq x$.

Count the number of beautiful sequences with the given number n and set A . Because this number is very large, calculate it modulo $10^9 + 7$.

INPUT

The first line contains two integers n and m - the length of the sequence and the number of elements of set A ($1 \leq n \leq 100, 1 \leq m \leq 8$). The second line contains m different integers a_i in ascending order - elements of set A ($1 \leq a_i \leq 8, a_i < a_{i+1}$)

OUTPUT

Print the answer, modulo $10^9 + 7$.

Sample Input	Sample Output
3 2	5
1 2	

Example explanation: The sequences are $[1; 1; 1]$, $[1; 1; 2]$, $[1; 2; 1]$, $[2; 1; 1]$, $[2; 1; 2]$.

PIE-EATING CONTEST

