Problem I - Cow Families

Farmer Jiang has m families of cows, and for the i-th family, there are a_i cows. In a lovely late summer weekend FJ arranged all $n = a_1 + a_2 + \cdots + a_m$ cows into exactly n pastures so that each cow could enjoy her own pasture!

After that, FJ marked each pasture by the cow's family number (which are conveniently numbered from $1, 2, \cdots, m$) and wrote down the sequence on paper. Surprisingly, he found that the **longest increasing subsequence** has exactly m numbers! Now FJ wonders, how many possible other arrangements of his cows there are such that this property would hold.

Help FJ calculate this number modulo 1000000007. Two arrangements are considered distinct if there is a pasture with a cow from a different family in each arrangement.

Input

The first line of input contains an integer T ($1 \leq T \leq 100$), indicating the number of test cases.

For each test case, the first line contains m ($1 \leq m \leq 50$).

The next line contains m integers separated by a whitespace. The i-th integer describes a_i ($1 \leq a_i \leq 50$), the number of cows in the i-th family.

Output

A single integer for each test case, the number of arrangements modulo 1000000007.

Sample Input

```
1
3
2 1 2
```

Sample Output

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11
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