

D. Take that Photo

Program:	photo.(cpp java py)
Input:	photo.in
Balloon Color:	Blue

Description

A kindergarten teacher gathers up her class for a school photo. The children run and stand in one line regardless of their height. That wouldn't look nice for the photo, so she asks for your help to rearrange the children in a non-decreasing order according to their height. You then realize that the ordering can be done in more than one way since some children have the same height. Being the inquisitive person, you decide to write a program that finds out how many different photos can be taken of the children in a non-decreasing order of their height.

Input

First line of inputs contains a single integer n ($1 \leq n \leq 100$) representing the number of test cases. Each of the next n lines contains a list of integers separated by 1 or more spaces as follows:

$m \ v_1 \ v_2 \ v_3 \ \dots \ v_m$ where $1 \leq m \leq 20$ (m being the number of children per photo)
and $0 \leq v_i \leq 100$.

Output

For each test case, you will output a single line of the form

$k. \ ans$

where k is the test case number starting with 1 , and ans is the number of different ways the integers can be arranged in a non-decreasing order.

Sample Input / Output

photo.in	OUTPUT
<pre> 3 4 1 2 1 4 8 1 2 1 2 1 2 2 1 6 7 5 1 4 23 11 </pre>	<pre> 1. 2 2. 576 3. 1 </pre>