

Problem E

You are attempting to create a new game that is played by rolling several dice. In order to determine scoring, you need to first know how many different formations can be rolled with those dice. We define a formation as the collection of values that are shown on the dice, without regard to order. Thus, 1, 1, 2, 1, 2, 1, and 2, 1, 1 are all the same formation, whereas 1, 1, 2, 1, 2, 2 and 1, 1, 3 are all different formations. Note that even though two dice may have a different number of sides, for the purpose of counting formations, only the number shown on them matters.

You are given a `int[] sides`, where the *i*-th element is the number of sides on the *i*-th die. The sides of an *n*-sided die contain all numbers between 1 and *n*, inclusive. Return the number of different formations that can be made from those dice.

- `sides` will contain between 1 and 32 elements, inclusive.
- Each element of `sides` will be between 1 and 32, inclusive.

See examples for input/output format.

E.IN

1
2
2 2

E.OUT

3