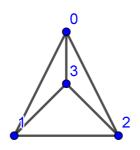
## **Tetrahedrons in the country**

Today we continue examine topology of the ancient country GRAPH. It was said that any four cities form a <u>tetrahedron</u> (or 4-vertex <u>clique</u>) if from every city of the tetrahedron there is a road to another tetrahedron city. In the picture below is an example of tetrahedron.

Theoretical note: all test cases are <u>Erdős–Rényi</u> connected low density graphs.



Your task is to find the number of tetrahedrons in the country.

### Input

The first line of input will contain one integer number  $4 \le N \le 900$ , number of cities in GRAPH. Follow N lines. Each line represents cities (direct neighbors) connected to the city number i (cities numbering is zero based) by one road.

#### **Output**

Print number of tetrahedrons in the GRAPH.

#### **Example**

Input:

123

023

0 1 3

012

# Output: