Problem A. Tetrahedrons in the country

Time limit	500 ms
Mem limit	1572864 kB
Code length Limit	50000 B
OS	Linux

Today we continue examine topology of the ancient country GRAPH. It was said that any four cities form a **tetrahedron** (or 4-vertex clique) 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 Erdős–Rényi 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	Output
4 1 2 3 0 2 3 0 1 3 0 1 2	1