Problem K
Business Intelligence
Time Limit: 4 seconds

In Mid-Autumn Festival, visitors not only enjoy attractions, buffet, or game shows, but also spend a lot of money to buy different products, gifts, souvenirs, etc. It would be wise to analyze transactions from previous years to predict which product a visitor may buy together with another product to increase the revenue for Festival Organizer.

In annual festival, there are no more than 10000 products. Each product has a unique product identifier, which is a positive integer that is no more than 10^9.

There are N customers ($1 \leq N \leq 10000$). For the ith customer, we have his or her history list L_i of all products that he or she purchased in previous Mid-Autumn Festivals. There are no more than 1000 items in each history list.

Giving a threshold T ($0 < T < 10^6$), two distinct products $\{x, y\}$ are considered to be a "common pair" if there are at least T customers bought these two products.

It is our task to identify all "common pairs" from the data on transactions in previous Mid-Autumn Festivals provided by the Festival Organizer.

Input

The first line of input contains two positive integers N and T ($1 \leq N \leq 10000$, $1 \leq T \leq 10^6$).

The ith line in the following N lines contains an integer k_i ($0 \leq k_i \leq 1000$), the number of products bought by the ith customer, following by k_i positive integers that are the identifiers of these products. The identifier of a product is a positive integer with the value from 1 to 10^9.

Output

Display a single integer that is the total number of "common pairs" found in the transactions in previous Mid-Autumn Festivals provided by the Festival Organizer.

Sample Input	Sample Output
5 2 3 100 987 1 2 987 1 0 1 100 5 4 987 12 4 2015	1

Explanation: there is only one "common pair" of products, that is $\{1, 987\}$.
The two pairs of products $\{x, y\}$ and $\{y, x\}$ are identical and should be counted only once.