Counting graphs

by Code_Addict

Alguru's teacher gave his class an assignment. Each student was given T undirected graphs and they had to count the number of connected components in each of them. A connected component in an undirected graph is a subgraph in which any two vertices are connected to each other by paths, and which is connected to no additional vertices in the supergraph.

Unfortunately, Alguru skipped the class and does not know anything about graphs. Help Alguru finish his assignment.

Input Format

The first line contains a single integer T representing the number of testcases. The first line of each testcase contains 2 space-separated integers N,M .N represents the number of vertices in the graph and the following M lines contains 2 space-separated integers A,B which represents there is a edge between vertex A and B. The vertices are numbered from 0 to N-1.

Constraints

- 1 <= T <= 100
- 2 <= N <= 100
- 1 <= M <= $\frac{n*(n-1)}{2}$
- 0 <= A,B <= N-1

Output Format

For each test case, print a single integer denoting the number of connected components in the graph.

Sample Input 0

```
1
3 1
0 1
```

Sample Output 0

```
2
```

Explanation 0

The graphs contains two connected components. One contains vertices 0 and 1 connected by an edge, and the other component contains vertex 2 only.

Contest ends in 7 hours

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Max Score: 8

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C++14

```cpp
#include <cmath>
#include <cstdio>
#include <vector>
#include <iostream>
#include <algorithm>
using namespace std;


int main() {
    /* Enter your code here. Read input from STDIN. Print output to STDOUT */
    return 0;
}
```

Line: 1 Col: 1

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