An undirected, unweighted graph is given. It is necessary to calculate the number of its connected components.

The input program is given two numbers N and M – the number of vertices and edges of the graph, respectively $(0 \le N \le 1000, 0 \le M \le 100000)$. The next M lines contain two numbers i and j $(1 \le i, j \le N)$, which means that the vertices i and j are connected by an edge.

Print the number of connected components.

Sample input 1:

- 6 4
- 3 1
- 1 2
- 5 4
- 2 3

Sample output 1:

3

Sample input 2:

- 64
- 4 2
- 14
- 64
- 3 6

Sample output 2:

 2