Strongly Connected Component

The Problem

Given a directed graph, you are to find the number of strongly connected components.

The Input

The input file name is 'scc.inp'. In the first line, two integer m and n are given: $m(\leq 10{,}000)$ being the number of vertices and $n(\leq 10{,}000)$ being the number of arcs. In the following n lines, each line has two different integers i and j, which indicates there is an arc from vertex i to vertex $j(0 \leq i,j \leq m-1)$.

The Output

The output file name is 'scc.out'. Given information regarding a directed graph, show the number of connected components in the graph.

Sample Input

```
7 8
0 1
1 2
2 3
3 4
4 5
5 3
1 6
6 0
```

Sample Output

```
3
```