# Programming assignment 12

# **Topological Sort**

## **Input (Standard input)**

In the first line, the number of vertices N ( $1 \le N \le 1,000$ ) is given.

From the next line, the adjacency list of graph G is represented by the incident vertices x and y.

This means the edge from vertex x to vertex y exists.

# **Output (Standard output)**

In the first line, if the graph G is a DAG, print 1. Otherwise, print 0.

If it is a DAG, in the next line, print the vertices in the topological order.

You must discover the lowest numbered node first (increasing order).

#### [Example]

Input	Output
9	1
1 4	783214695
1 5	
2 5	
4 5	
4 6	
69	
7 6	
7 8	
8 9	

## **Description**

- 1. File name must be CountingSort.cpp
- 2. Make a comment of your student ID, name and class in the first line of the source code.
  - ex) 2014601028\_Honggildong\_A or 2014601028\_홍길동\_A
- 3. Please keep the source code that you have submitted for some unexpected accident.