Programming assignment 11

Connected component

Input (Standard input)

  In the first line, the number of vertices N ($1 \leq N \leq 1,000$) is given.
  From the next line, the adjacency list of graph G is represented as the two integers x, y.
  This means the edge from vertex x to vertex y exists.

Output (Standard output)

  In the first line, print the number of connected components.

  In the next N lines, print the component number of each vertex.

[Example]

Input	Output
6 1 2 1 4 2 5 3 6	2 1 1 2 1 1 2

Description

1. File name must be Connected_component.cpp

2. Make a comment of your student ID, name and class in the first line of the source code.

  ex) 2014601028_Honggildong_A

3. Please keep the source code that you have submitted for some unexpected accident.