# Algorithms Advanced with C#: Exam

Please submit your solutions (source code) to all the below-described problems in [Judge](https://judge.softuni.org/Contests/4128).

## 3. Bitcoin Groups

You are provided with a dataset that represents the **Bitcoin network**.

Transactions within this network occur between different wallets, and each transaction is **unidirectional**, meaning that funds are transferred from one wallet to another.

Your objective is to develop an algorithm that can **identify interconnected groups of wallets** and determine **the most active group** based on **the count of wallets it contains**. An interconnected group of wallets denotes a collection of wallets wherein there exists a **path of transactions connecting any two wallets within the group**.

Furthermore, you are required to provide a **list of all direct transactions made within the identified group**.

### Input

* + On the first line, you will receive an integer - **w** - number of wallets.
    - Wallets will be labeled from **0** to **w - 1**.
  + On the next line, you will receive an integer - **t** - number of transactions.
  + On the next **t** lines, you will receive all transactions in the following format: "**{sender}** **{receiver}**".

### Output

* + Print all transactions in the most active group in the following format: **"{sender} -> {receiver}"**.
  + The order of the transactions **does not matter**.

### Constraints

* + There will always be only one group that can be considered **"the most active group"**.

### Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| 14  20  0 1  0 11  0 13  1 6  2 0  3 4  4 3  4 6  5 13  6 0  6 11  7 12  8 6  8 11  9 0  10 4  10 6  12 7  13 2  13 9 | 0 -> 1  0 -> 13  9 -> 0  6 -> 0  1 -> 6  2 -> 0  13 -> 9  13 -> 2 |
| 3  4  0 2  1 2  2 0  2 1 | 0 -> 2  2 -> 0  2 -> 1  1 -> 2 |