# 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).

## 2. Data Streaming

A company has a **network of computers** that are connected by a series of cables. Each **cable has a certain capacity**, which is the **maximum amount of data** that can be transferred through it in a given amount of time.

However, some computers in the network have been corrupted and are blacklisted, meaning they **cannot be used to stream or receive streamed data** because the data could be leaked.

The company wants to find the **maximum amount of data** that can be transferred from a **source computer** to a **destination computer**, taking into account the blacklist.

### Input and Constraints

* + On the first line, you will receive an integer **n**, representing the number of computers in the network.
    - The computers will be labeled from **0** to **n - 1**.
  + On the second line, you will receive an integer **c**, representing the number of connections between the computers.
  + The next **c** lines describe the connections between the computers. Each line contains three space-separated integers: **from**, **to**, and **capacity**. It indicates that there is a cable connecting **{computer from}** to **{computer to}** with a maximum capacity of **capacity**.
  + Connections between computers are **one-way** and two computers **cannot be connected** by more than one cable.
  + The next line contains a **comma-separated list of integers** representing the **corrupt computers** in the network.
    - The corrupt computers will never be either the **source** or the **destination** computers.
    - There will be always at least one corrupted computer.
  + The next line contains an integer **source**, representing the source computer.
  + The last line contains an integer **destination**, representing the destination computer.

### Output

* + The output consists of a single line containing an integer, which represents the **maximum amount of data** that can be transferred.

### Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| 6  9  0 1 10  0 2 10  1 2 2  2 4 9  1 4 8  1 3 4  4 3 6  4 5 10  3 5 10  2,4  0  5 | 4 |
| 4  5  0 1 1000  0 2 1000  1 2 1  1 3 1000  2 3 1000  1  0  3 | 1000 |