**Algorithms with Java: Exam Retake 08-08-2020**

This document defines the exam for ["Algorithms – Advanced (Java)" course @ Software University](https://softuni.bg/trainings/2992/algorithms-advanced-with-java-june-2020). Please submit your solutions (source code) of all below described problems in [Judge](https://judge.softuni.bg/Contests/2540/Algorithms-Advanced-with-Java-Exam-Retake-08-August-2020).

1. **Vampire Labyrinth**

You have to do something to help the team of vampire slayers to reach the temple of Bag' Hara and defeat the master vampire.

You need to plan the path **from the landing place to the temple through a labyrinth**. The only requirement is to **find** the **way** **with least vampire guards**. The labyrinth **contains many different ways to go through** and for each way you know **the vampires count,** thanks to your hi-tech vamp-detector.

## Input

* The **first line** holds an integer **n** – the number of nodes
* On the **second line**, you will receive the number **m** – the number of ways
* On the **third** **line** the landing place and the temple **{landingPlace} {temple}**
* At the next **m** **lines**, you will receive the labyrinth in the format: **{from} {to} {vampiresCount}**

## Output

* Print on the **first** line the **way** to the temple
* On the second line the **number of vampires along the way**

## Constraints

* Number of nodes will be an integer in the range [**0**…**10000**]
* Number of ways will be an integer in the range [**0…10000**]
* The number of vampires will be an integer in the range [**0…10000**]
* All nodes will be numbered from **0** to **N - 1**.

## Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| 4  3  0 3  0 1 8  1 2 4  2 3 5 | 0 1 2 3  17 |
| 7  9  3 5  0 1 8  1 2 4  2 3 5  3 4 12  4 5 8  4 6 1  6 5 2  3 4 2  0 1 2 | 3 4 6 5  5 |

*“There's real poetry in the real world. Science is the poetry of reality”*

*― Richard Dawkins*