



# Lab: I/O and Streams

#### **Duration:**

The duration of the lab is 2 hours.

## **Exercise Details**

The following source **file** contains the **statistics** of all countries for the confirmed cases, deaths and recoveries of **COVID-19** to date:

https://raw.githubusercontent.com/datasets/covid-19/master/data/countries-aggregated.csv

The dataset is in a **CSV** (Comma-Separated Values) format which can be easily read and understood by machines.

You will be given the sample code that can read and load each value directly as a string into your application.

### **Task**

Using the **stream API** of **Java**, calculate the following statistics:

- 1. The country which has the **most confirmed cases**.
- 2. The **number of records** for Greece.
- 3. The maximum number of deaths per each country.
- The average number of deaths around the world.

**Note**: The CSV entry for South Korea is written as the following: "Korea, South". This case may need special handling during the manipulation process.

## **Bonus Task**

Download the CSV file to your computer and create code that can read and load the file, without having to access its online version.