

# **Data structures and Algorithms**

*Programming assignment 2*

## Data structures used

*Structure, vector, unordered maps, multimaps.*

## Reason for the selected data structure.

### 1. Structure.

Allows for simple storage of all the different components linked with the town ID.

### 2. Vector.

Allows us to keep track of the town IDs and lets us return the data to the main function in the required order without any troubles.

### 3. Unordered maps

Allows for storing town IDs linked to the town information with proper hashing hence allowing us to retrieve the town information through key with very high efficiency.

### 4. Multimaps

Allows easy storage of the data in proper order, allowing us to access an ordered list without having the need to ever sort them.