## **Bus company 1**

A bus company wants to improve its service using an app that can monitor bus routes usage. You need to write this app for them, with the following functionalities and a text-based user interface.

- 1. **(2p)** Update data about a bus route, given its ID. The format is: **<id>,<route code**,**<usage percentage>,<number of buses>**. The **id** and **route code** must each be unique, the **route code** must contain at most 3 characters, the **usage percentage** must be between 0 and 100 inclusive, and the **number of buses** must be an integer.
- 2. **(1.5p)** Update all bus routes whose usage percentages are above **85** by increasing the number of buses on those routes by 1.
- 3. (1.5p) Remove all bus routes whose usage percentages are below 20.

**Example** – you need to have similar files with minimum 10 valid entries in each!

bus routes file
1,24b,93,2
3,35,83,3
10,11,19,1

For the example above, the second operation would increase the number of buses on route **24b** to **3**. The third operation would remove bus route **11**.

## Scoring:

- 1. **2p** are given for specifications and tests;
- 2. **1p** is given for correctly using layered architecture principles;
- 3. **1p** is given for style: proper variable names, access levels, consistency etc.

## **Bus company 1**

A bus company wants to improve its service using an app that can monitor bus routes usage. You need to write this app for them, with the following functionalities and a text-based user interface.

- 1. **(2p)** Update data about a bus route, given its ID. The format is: **<id>,<route code**,**<usage percentage>,<number of buses>**. The **id** and **route code** must each be unique, the **route code** must contain at most 3 characters, the **usage percentage** must be between 0 and 100 inclusive, and the **number of buses** must be an integer.
- 2. **(1.5p)** Update all bus routes whose usage percentages are above **85** by increasing the number of buses on those routes by 1.
- 3. (1.5p) Remove all bus routes whose usage percentages are below 20.

**Example** – you need to have similar files with minimum 10 valid entries in each!

bus routes file	
1,24b,93,2	
3,35,83,3	
10,11,19,1	

For the example above, the second operation would increase the number of buses on route **24b** to **3**. The third operation would remove bus route **11**.

## Scoring:

- 1. **2p** are given for specifications and tests;
- 2. **1p** is given for correctly using layered architecture principles;
- 3. **1p** is given for style: proper variable names, access levels, consistency etc.