

# EXERCICE 1

## WHAT YOUR PROGRAM SHALL DO

We want to manage the number of students per class, so we use a dictionary:

- The key is the name of the class (*ex* : "2021C" )
- The value is the number of students

### INPUTS:

- 1 dictionary STRING (key) -> INTEGER (value) :  
`{"2021A": 20, "2021B": 30, "2021C": 15 }`

### OUTPUT:

- Print for each class the number of students as follows:  
Class 2021A has 20 students  
Class 2021B has 30 students  
Class 2021C has 15 students

# EXERCICE 2

## WHAT YOUR PROGRAM SHALL DO

We want to manage the number of students per class, so we use a dictionary:

- The key is the name of the class (*ex* : "2021C" )
- The value is the number of students

We want to add students in a class

### INPUTS:

- 1 dictionary STRING (key) -> INTEGER (value) :  
`{"2021A": 20, "2021B": 30, "2021C": 15 }`
- Number of students to add:  
`4`
- Class to add students  
`2021A`

### OUTPUT:

- Print for each class the **new** number of students as follows:  
Class 2021A has 24 students  
Class 2021B has 30 students  
Class 2021C has 15 students

## EXERCICE 3

### WHAT YOUR PROGRAM SHALL DO

We want to manage the number of students per class, so we use a dictionary:

- The key is the name of the class (*ex* : "2021C" )
- The value is the number of students

We have 2 dictionaries and we want to merge them into 1

#### INPUTS:

- 2 dictionary STRING (key) -> INTEGER (value) :  
`{"2021A": 20, "2021B": 30, "2021C": 15 }`  
`{"2021A": 15, "2021C": 10, "2021D": 99 }`

#### OUTPUT:

- Print the dictionary, resulting from the merge of the 2 given dictionaries  
`{"2021A": 35, "2021B": 30, "2021C": 25, "2021D": 99 }`

Explanation: Here, for class 2021A the first dictionary gave us 20 students and the second one 15 students. SO the total number of student will be 35 for class 2021A

## EXERCICE 4

### WHAT YOUR PROGRAM SHALL DO

#### INPUTS:

- 1 string  
`good !`

#### OUTPUT:

- A dictionary :
  - o The key is the character (one key per character in the string)
  - o The value is the occurrence of the character in the string (example : here we have 2 "o")

`{"g": 1, "o": 2, "d": 1, "!": 1}`

**Warning: we don't count the white characters! (skip them)**