

In this project, you will gain experience in thinking about problems in terms of classes and inherited classes, each instance of which contains specific attributes and methods allowing you to manipulating them.

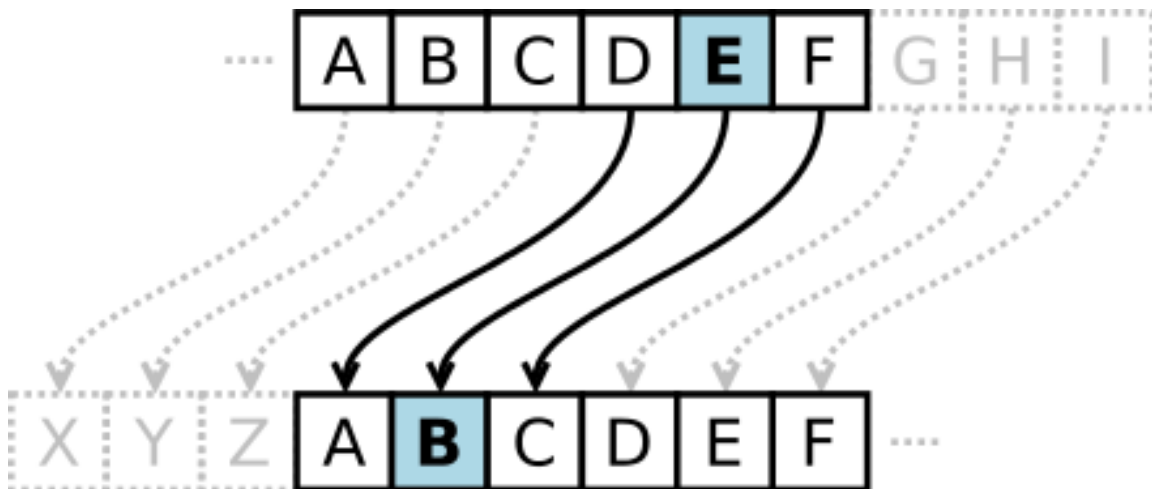
### Part 1.

You will start this project with the Python part and from the file called myPythonClass.py and follow the instructions.

In the Python part of the project, you will create a Caesar's code encryptor and a decoder.

What is Caesar's code?

In cryptography, a Caesar's code is one of the simplest and most widely known encryption techniques. It is a type of substitution in which each letter in a plain text is replaced by a letter at some fixed number of positions down the alphabet. For example, with a **left shift** of 3, D would be replaced by A, E would become B, and so on. The method is named after Julius Caesar, who used it in his private correspondence.



Example with **right shift**:

plain text: 'abcdef'

shift: 2

caesar's code: 'cdefgh'

plain text: 'Hello, World!'

shift: 4

caesar's code: 'Lipps, Asvph'

## Part 2:

In this part, you will use the file called `myRClass.R` and follow the instructions.

In the R part of the project, you will create an interactive employee class who interacts with his boss. Try following the instructions in the code.

## Part 3:

You will test all of your objects created in the Python and R classes in the Main Program called `myMainProgram.R` and follow the instructions.