



Chapter 4

Python Advanced

Main takeaways of this chapter

- ★ Lists are specific variables that can store several values (ex: students in a class).
- ★ Loops are used to repeat a specific code several times (ex: make the call by using the students list).
- ★ There are two types of loops: *while* and *for*. There are used in different situations.
- ★ Functions are useful to keep the main code as simple as possible. You can use them to do a specific task (ex: display the average of a student's marks).
- ★ Functions can have parameters (ex: student name and marks list). You can use them as variables in the function code.
- ★ Modules are libraries we can use to simplify our code even more. Some developers have created great functions for us, we can just reuse them directly in our scripts. Popular examples are handling dates, mathematical functions or GUI.
Check the last chapter for more examples.
- ★ Most modules need to be installed first with apt. Ex: `sudo apt install python3-<module>`
- ★ Exceptions are useful to handle expected and unexpected errors in your code.

Action steps

- Give an example of when you'll use a "for" loop, and then a "while" loop.
- With your words, what's the difference between a function and a module?
- [Download my cheat sheet here](#). Print it if you want. You can also create your own if you need more details, or to help you remember the syntax.
- Do the exercise given in the book.