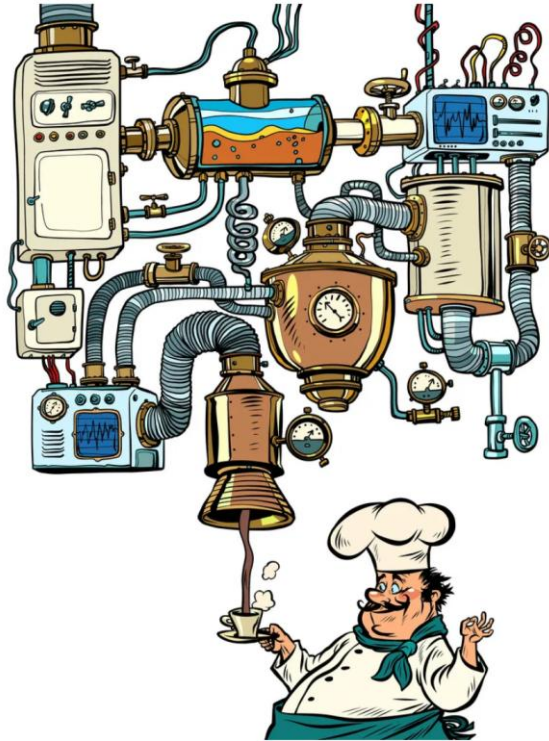


# The Importance of Python Functions: Abstraction and Reusability

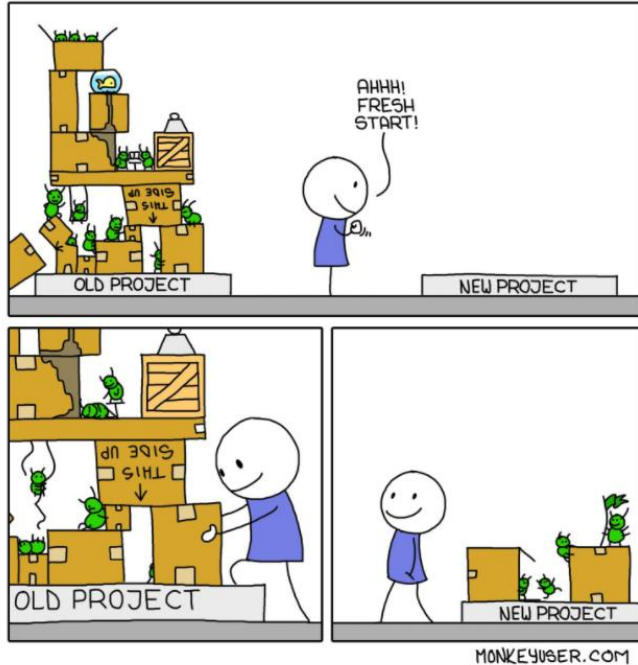


**Abstraction** focuses on hiding the internal implementations (e.g. of a function) from the users. The users only interact with the basic implementation of the function, but inner working is hidden.

Image credit: <https://www.vectorstock.com>

# The Importance of Python Functions: Abstraction and Reusability

## CODE REUSE



*“And when it comes to **reusing code** in Python, it all starts and ends with the humble function. Take some lines of code, give them a name, and you've got a function (which can be reused). Take a collection of functions and package them as a file, and you've got a module (which can also be reused).”*

Paul Berry (2016). Head First Python

Image credit: <https://www.pinterest.com>

# The Importance of Python Functions: Abstraction and Reusability

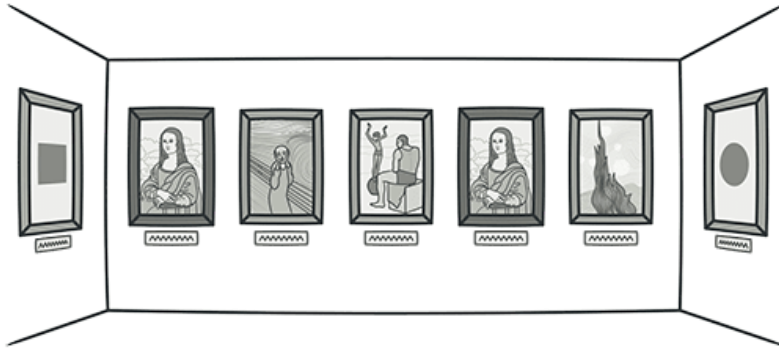


Image credit: <https://refactoring.guru/smells/duplicate-code>

**Duplicate code** is a repetition of a line or a block of code in the same file or sometimes in the same local environment.

Duplicate code:

- makes programs lengthy and bulky
- makes bug-fixing and programming less efficient
- decreases the code quality
- increases security risks