EVERYTHING IS AN OBJECT

Throughout this course, we'll encounter many data types.

- Integers (`int`)
- Booleans (`bool`)
- Floats (`float`)
- Strings (`str`)
- Lists (`list`)
- Tuples (`tuple`)
- Sets (`set`)
- Dictionaries (`dict`)
- None (`NoneType`)

We'll also see other constructs:

- Operators (`+, -, ==, is, …`)
- Functions
- Classes
- Types

and many more…

But the one thing in common with all these things, is that they are all objects (instances of classes)

- Functions (`function`)
- Classes (`class`) [not just instances, but the class itself]
- Types (`type`)

This means they all have a memory address!

As a consequence:

Any object can be assigned to a variable
including functions…

Any object can be passed to a function
including functions…

Any object can be returned from a function
including functions…

```
def my_func():
    …
```

id(my_func)
→ 0x1000

`my_func` is the name of the function

`my_func()` invokes the function