

Immutable (nice)
(Value Types)

int, float, str

functions, tuples

2 "Hello"

Does not change with
time.

mutable (evil)
(Reference Types)

list

[1, 2]

Can change with time.

Mutable values / Reference types.

Keep a unique reference to mutable values
at all times.

`range(5, 10)` \rightarrow 5, 6, 7, 8, 9

[1:3]

¹²
`range(6, 8)` \rightarrow 6, 7

Eager (list is
eager)

$$5+3=8$$

lazy (map is lazy)

$$5+3$$

compute final values
as soon as you see the
expression.

Remember the expr.
but compute value
only when needed.

map is an iterable where you ~~consume~~^{eat}
the elements of the sequence when
you iterate over it.