

Data Structures (Python)

a → 97
b → 98

to organize & store the data

original_string

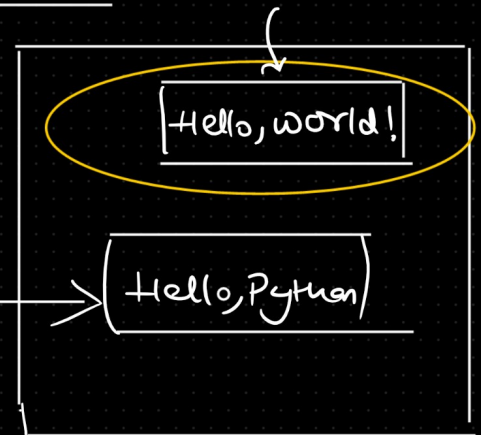
```
original_string = "Hello, world!"
```

```
## Replace "world" with "Python"
```

```
new_string = original_string.replace("world", "Python")
```

```
print(new_string)
```

new_string



0	1	2	3	4	5	6	7	8	9	10	11	12
H	e	l	l	o	,		w	o	r	l	d	!

7

Heterogeneous data elements

① List → Ordered collection of
items, mutable

② Tuple → ordered collection of
items, immutable

③ Set → Unordered collection of
unique items, mutable

④ Dictionary → unordered

collection of key-value
pair, mutable

list-4 = ['One', [1, 2, 3], [4, 5, 6]]

↑ 1
↓ 0 ↓ 2

list-4[1] = [1, 2, 3]

0 1 2

list-4[1][1] = 2

by default,
left to
right

-5 -4 -3 -2 -1
(((((

letters = ['a', 'b', 'c', 'd', 'e']
print(letters[-3:-1]) → [c, d]

print(letters[-1:-3])

↖ end -1

print(letters[-1:-3:-1]) → e d

↖ Step size