

Python for Beginners, session 4

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Plan for today

- review last day exercises

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- learn about dictionaries

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- learn about dictionaries
- what's the path forward

Last day exercises

Alert

That's an exampleblock

Alert

That's an alertblock

Dictionaries

Dictionaries

Dictionaries are another kind of collection in Python. Dictionaries map keys to values.

Creating dictionaries

We use curly brackets `{}` to declare dictionaries.

```
translations = {  
    "es": "Hola!",  
    "it": "Ciao!",  
    "en": "Hello!"  
}
```

colon for separating key and value

comma for separating entries

Creating dictionaries

We can also create empty dictionaries

```
translations = {}
```

Creating dictionaries

Adding elements

We add elements to dictionaries given their specific index:

```
translations = {}  
translations["en"] = "Hello"  
translations["it"] = "Ciao"  
translations["es"] = "Hola"
```

Updating elements

we always can change a value in the dictionary by re-assigning the key

```
translations = {}  
translations["en"] = "Hello"  
translations["en"] = "WHATUP!"
```

Updating elements

Deleting elements

We can delete an element of the dictionary using the **pop** method

```
translations = {}  
translations["en"] = "Hello"  
translations.pop("en")
```

Deleting elements

Getting all keys or values

We can always get all **keys** or **values** from the dict as a list using either the **.keys()** or **.values()** method

```
users = {  
    1: "Pepe",  
    22: "Peter",  
    44143: "Johnny",  
    2: "Chuck"  
}
```

```
users.keys()
```

```
users.values()
```

Getting all keys or values

for loops

In the same way we used **for** loops to iterate over elements of a list, we can use them to iterate over elements of a dictionary.

The difference is that, with dictionaries, the **iteration variable** will represent the **current key**, not the **current value**.

for loops

```
band = {  
    "johnny": "plays drums",  
    "joey": "plays guitar",  
    "markee": "sings",  
    "dee-dee": "plays bass-guitar"  
}  
  
for member in band:  
    print(member + " " + band[member] + " in The Ramones")
```

The path forward

from now you probably don't want

Thank you all!

Any comments or suggestions are more than welcome :D

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