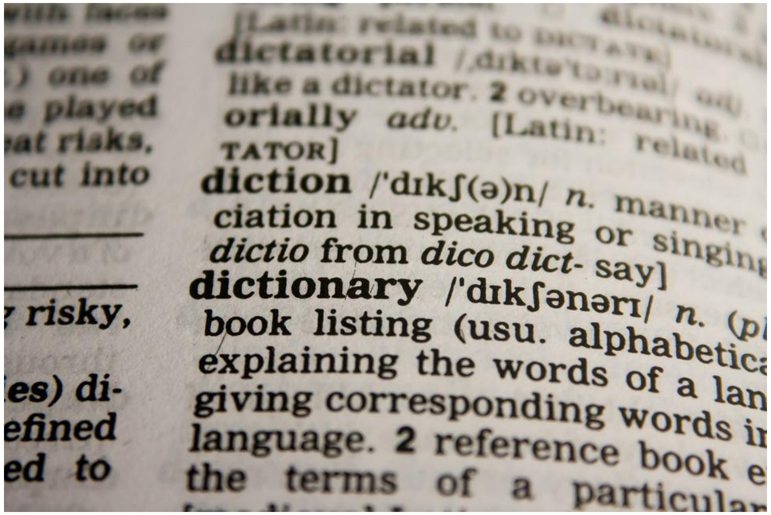
Dictionary

Dictionaries: Mapping Data Type



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[Latin: related to DICTATE]
dictatorial /dɪktəˈtɔːrɪəl/ adj.
like a dictator. 2 overbearing.
orially adv. [Latin: related
TATOR]
diction /ˈdɪkʃ(ə)n/ n. manner
ciation in speaking or singing
dictio from dico dict- say]
dictionary /ˈdɪkʃənərɪ/ n. (pl
book listing (usu. alphabetica
explaining the words of a lan
giving corresponding words in
language. 2 reference book e
the terms of a particular

Dictionary: n. book listing ...

key value

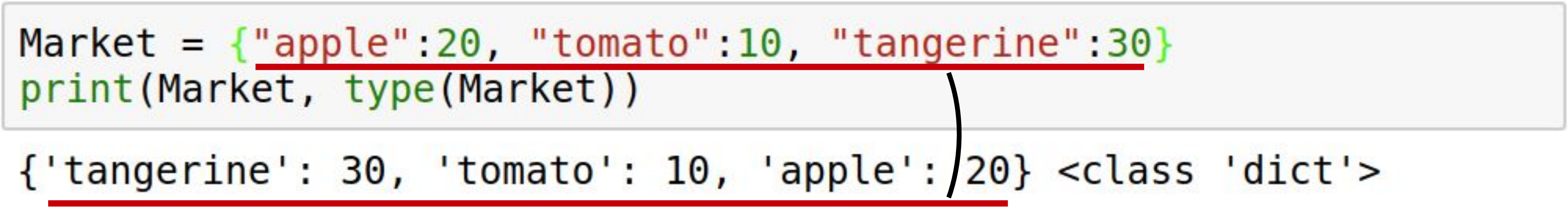
“Key” is not a number index.

Dictionary is an unordered list.

Dictionary = Mapping between key(word)s and values (meanings)

List (tuple, string) = Mapping between indices (integers) and values

Dictionary: Syntax



```
Market = {"apple":20, "tomato":10, "tangerine":30}
print(Market, type(Market))
```

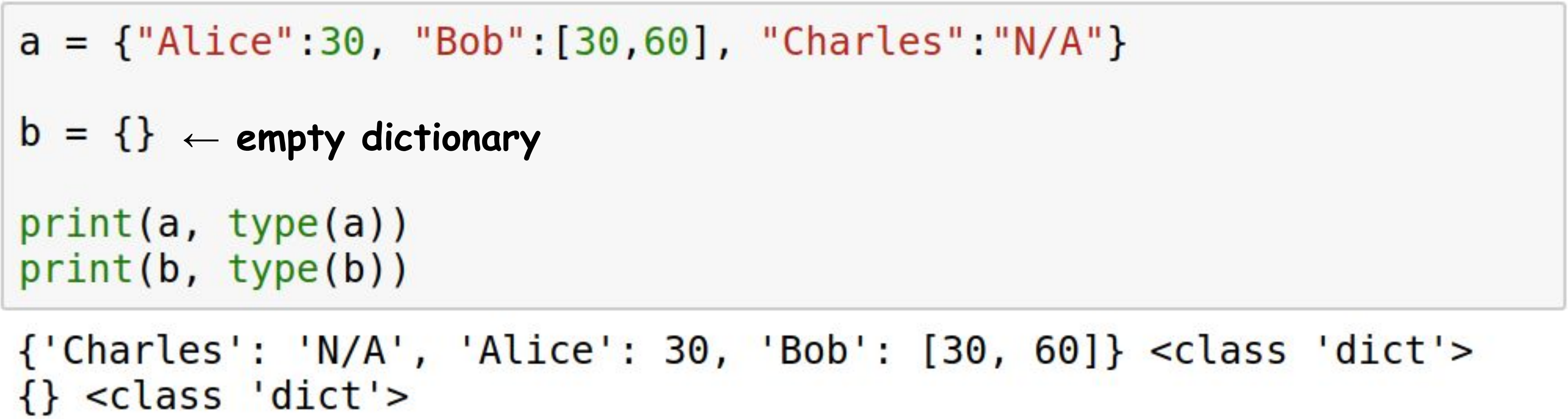
```
{'tangerine': 30, 'tomato': 10, 'apple': 20} <class 'dict'>
```

- { } (curly bracket) is used to define a dictionary data type.

- The dictionary has multiple pairs, each of which relates a key and a value by using colon (:).

Key : Value

Dictionary: Syntax



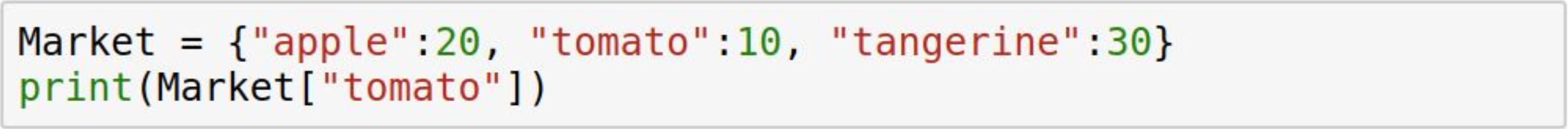
```
a = {"Alice":30, "Bob":[30,60], "Charles":"N/A"}

b = {} ← empty dictionary

print(a, type(a))
print(b, type(b))
```

```
{'Charles': 'N/A', 'Alice': 30, 'Bob': [30, 60]} <class 'dict'>
{} <class 'dict'>
```

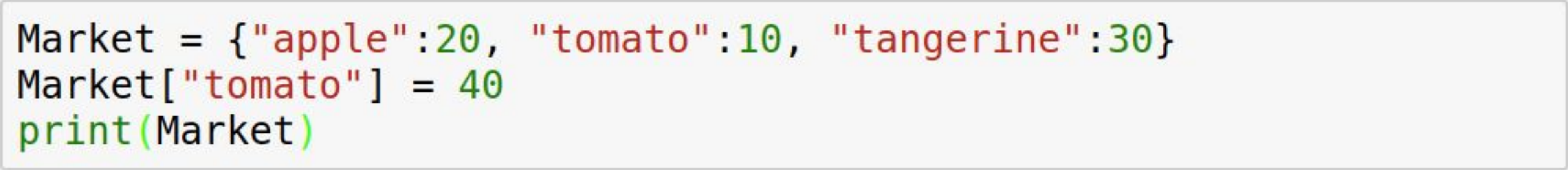
Dictionary: Manipulating Values



```
Market = {"apple":20, "tomato":10, "tangerine":30}
print(Market["tomato"])
```

```
10
```

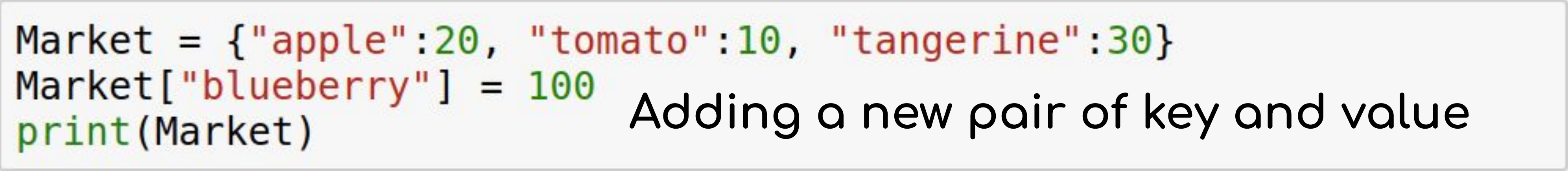
Accessing to Single Value : Dictionary[key]



```
Market = {"apple":20, "tomato":10, "tangerine":30}
Market["tomato"] = 40
print(Market)
```

```
{'tangerine': 30, 'tomato': 40, 'apple': 20}
```

Changing existing values associated with some keys

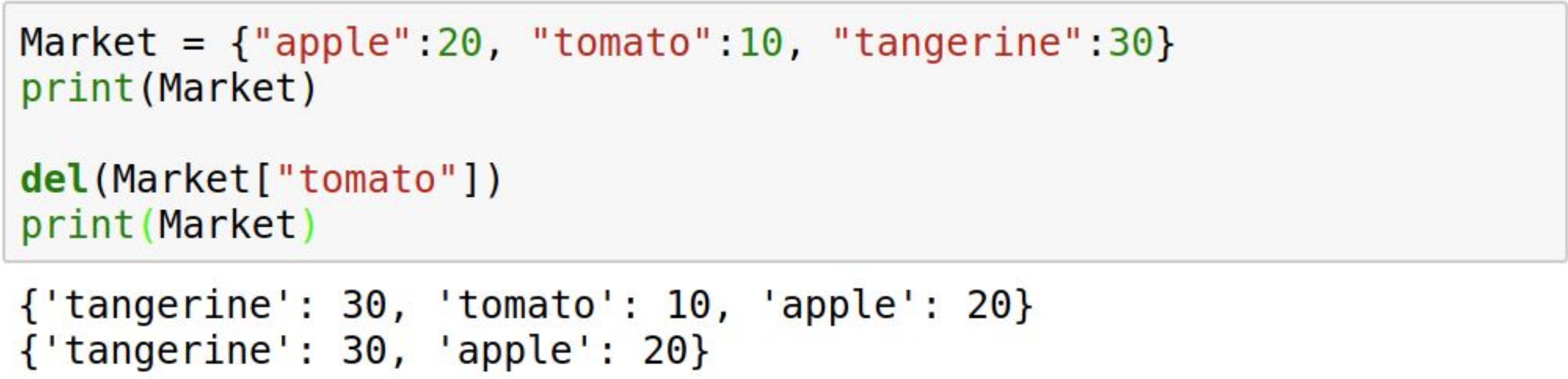


```
Market = {"apple":20, "tomato":10, "tangerine":30}
Market["blueberry"] = 100
print(Market)
```

Adding a new pair of key and value

```
{'tangerine': 30, 'blueberry': 100, 'tomato': 10, 'apple': 20}
```

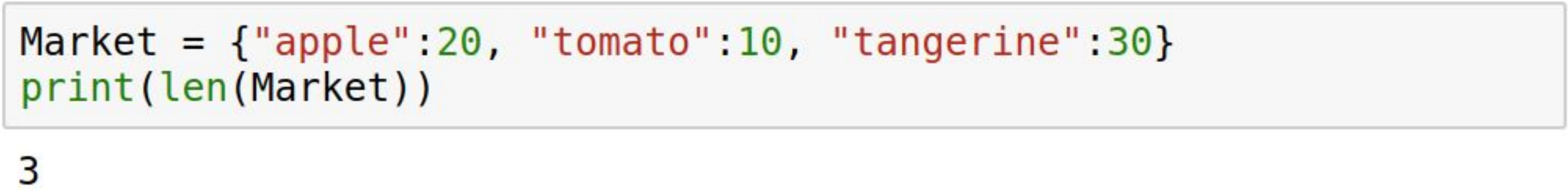
Dictionary : Built-in Functions



```
Market = {"apple":20, "tomato":10, "tangerine":30}
print(Market)

del(Market["tomato"])
print(Market)
```

```
{'tangerine': 30, 'tomato': 10, 'apple': 20}
{'tangerine': 30, 'apple': 20}
```



```
Market = {"apple":20, "tomato":10, "tangerine":30}
print(len(Market))
```

```
3
```