

CHAPTER 6

DICTIONARRY

Example of code
with duplicated values in array

A **array** provide a **VALUE** from an **INDEX**

```
a = [1, 2, 3]
```

```
print(a[1] )
```

[1, 2, 3]



INDEX:

0

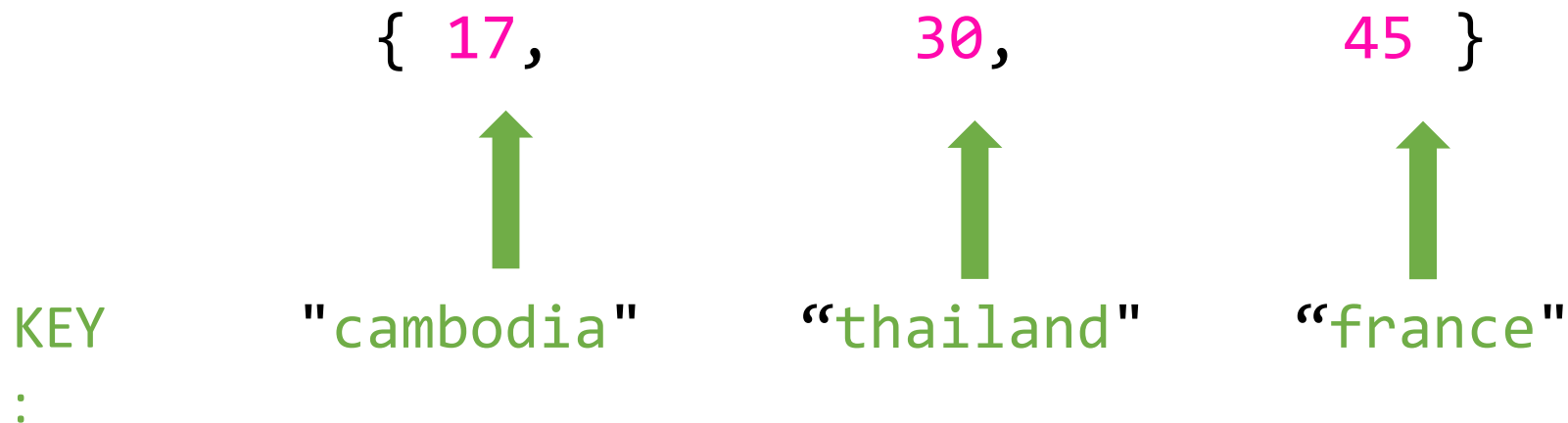
1

2

A Dictionary provide a **VALUE** from a **KEY**

```
a = { "cambodia": 17, "thailand" : 30, "france" : 45 }
```

```
print(a["cambodia"] )
```



1- Let's define an dictionary !

dictionaryName = { key: value, key: value, ... }

Coma to separate each items

Start dictionary

Colon to separate key and value

End dictionary

The diagram illustrates the syntax of a dictionary definition. The text 'dictionaryName = { key: value, key: value, ... }' is shown. Annotations include: a green arrow pointing to the comma between 'value' and 'key' with the text 'Coma to separate each items'; a green arrow pointing to the colon between 'key' and 'value' with the text 'Colon to separate key and value'; a red arrow pointing to the opening curly brace with the text 'Start dictionary'; and a red arrow pointing to the closing curly brace with the text 'End dictionary'. The words 'key' and 'value' are color-coded: 'key' is green and 'value' is pink.



What this code will print ?

```
countries = {  
    "khmer": 17,  
    "thai" : 30,  
    "vietnam": 50  
}
```

```
print(countries["khmer"])
```

2- Adding New Items

```
studentsAge = { }
```

① `studentsAge['sokan'] = 25`

← `{ 'sokan': 25 }`

2- Adding New Items

```
studentsAge = { }
```

```
studentsAge[ 'sokan' ] = 25
```

②

```
studentsAge[ 'seiha' ] = 95
```



```
{  
  'sokan': 25,  
  'seiha': 95,  
}
```


2- Adding New Items

```
studentsAge = { }
```

```
studentsAge[ 'sokan' ] = 25
```

```
studentsAge[ 'seiha' ] = 95
```



**Each key
Is UNIQUE !**

3 `studentsAge['sokan'] = 35`



```
{  
  'sokan': 35,  
  'seiha': 95,  
}
```



What this code will print ?

```
menu = {}  
menu["MONDAY"] = "rice"  
menu["TUESDAY"] = "noodles"  
menu["MONDAY"] = "soup"  
  
print(menu["MONDAY"] )
```

Example of code
with dictionary

3- Loop on dictionary using keys

```
food = {  
    "name": "Bay Char",  
    "price": 1000  
}
```

```
for key in food:  
    print(key)
```



```
name  
price
```


```
for key in food:  
    print(food[key])
```



```
Bay Char  
1000
```

4- Remove Items

```
studentsAge = { }
```

① `studentsAge['sokan'] = 25`  `{ 'sokan': 25 }`

4- Remove Items

```
studentsAge = { }
```

```
studentsAge[ 'sokan' ] = 25
```

② `studentsAge.pop('sokan')`  `{ }`