Dictionaries

Unordered, custom-indexed, data structures

Dictionary Basics

Store multiple pieces of information, like a List.

Rather than using 0-indexed positions like a List, Dictionaries use "keys".

Dictionaries have no order. How and when you add data does not matter, and they cannot be sorted.
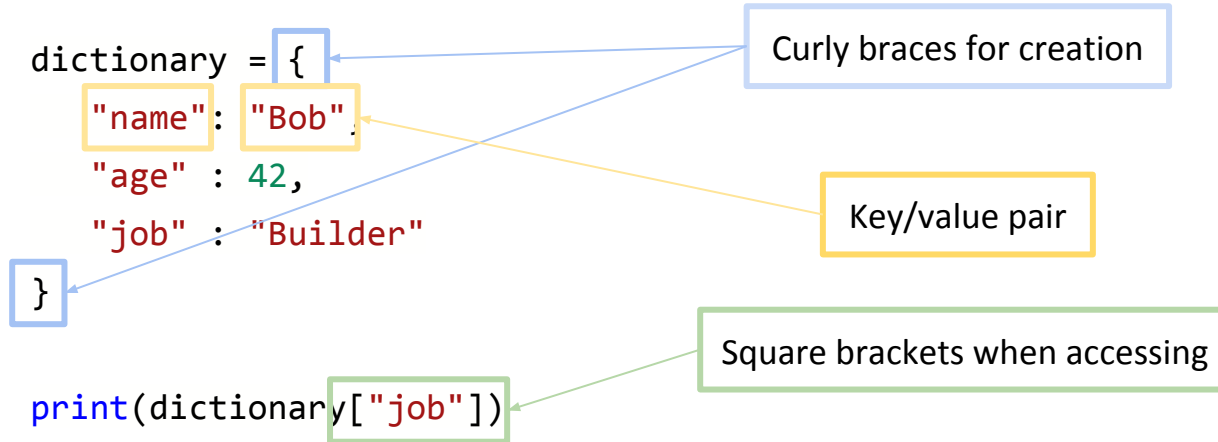
Syntax

Are with defined with { } where a List is created with [ ]

Colons : separate the key from the value.

But,

You still use [ ] to access the items inside.

Key, value pairs

```
dictionary = {
    "name": "Bob",
    "age" : 42,
    "job" : "Builder"
}

print(dictionary["job"])
```

Curly braces for creation

Key/value pair

Square brackets when accessing

With a List

Index	Value
0	"Bob"
1	42
2	"Builder"

With a Dictionary

Key	Value
"name"	"Bob"
"age"	42
"job"	"Builder"

https://www.w3schools.com/python/python_ref_dictionary.asp

Practice problem

Define the stock and the prices of a small shop.

Define a function compute_bill that accepts list of items. Check whether the shop has each item in stock, and then calculate the total price of the shopping list.

Finally, modify the stock of the shop to reflect the items bought.