# Dictionary: 16/10/2025

* Dictionary are used to store are key values
* It is collection of order changeable and do not allow duplicates
* As a python version 3.7 dictionary are order
* But a python 3.6 earlier dictionary are unorder
* Dictionary are return with curly brackets and as keys and values

A dictionary in Python is an unordered, mutable, and indexed collection of key–value pairs.

## Dictionary

Dictionaries are used to store data values in key:value pairs.

A dictionary is a collection which is ordered\*, changeable and do not allow duplicates.

As of Python version 3.7, dictionaries are *ordered*. In Python 3.6 and earlier, dictionaries are *unordered*.

Dictionaries are written with curly brackets, and have keys and values:

Example:

Create and print a dictionary:

thisdict = {  
  "brand": "Ford",  
  "model": "Mustang",  
  "year": 1964  
}  
print(thisdict)

## Dictionary Items:

Dictionary items are ordered, changeable, and do not allow duplicates.

Dictionary items are presented in key:value pairs, and can be referred to by using the key name.

Example:

Print the "brand" value of the dictionary:

thisdict = {  
  "brand": "Ford",  
  "model": "Mustang",  
  "year": 1964  
}  
print(thisdict["brand"])

## Dictionary Length:

To determine how many items a dictionary has, use the [len()](https://www.w3schools.com/python/ref_func_len.asp) function:

Example:

Print the number of items in the dictionary:

print(len(thisdict))

## Dictionary Items - Data Types

The values in dictionary items can be of any data type:

Example

String, int, boolean, and list data types:

thisdict = {  
  "brand": "Ford",  
  "electric": False,  
  "year": 1964,  
  "colors": ["red", "white", "blue"]  
}

## type():

From Python's perspective, dictionaries are defined as objects with the data type 'dict':

<class 'dict'>

Example:

Print the data type of a dictionary:

thisdict = {  
  "brand": "Ford",  
  "model": "Mustang",  
  "year": 1964  
}  
print(type(thisdict))

## The dict() Constructor:

It is also possible to use the [dict()](https://www.w3schools.com/python/ref_func_dict.asp) constructor to make a dictionary.

Example:

Using the dict() method to make a dictionary:

thisdict = dict(name = "John", age = 36, country = "Norway")  
print(thisdict)