## **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**[**Get**](https://www.w3schools.com/python/python_server.asp)

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"])

## **Ordered or Unordered?**

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

When we say that dictionaries are ordered, it means that the items have a defined order, and that order will not change.

Unordered means that the items do not have a defined order, you cannot refer to an item by using an index.

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# **Python Dictionaries**

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

### **Example**[**Get your own Python Server**](https://www.w3schools.com/python/python_server.asp)

Create and print a dictionary:

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

[Try it Yourself »](https://www.w3schools.com/python/trypython.asp?filename=demo_dictionary)

## **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"])

[Try it Yourself »](https://www.w3schools.com/python/trypython.asp?filename=demo_dictionary_brand)

## **Ordered or Unordered?**

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

When we say that dictionaries are ordered, it means that the items have a defined order, and that order will not change.

Unordered means that the items do not have a defined order, you cannot refer to an item by using an index.

## **Changeable**

Dictionaries are changeable, meaning that we can change, add or remove items after the dictionary has been created.

## **Duplicates Not Allowed**

Dictionaries cannot have two items with the same key:

### **Example**

Duplicate values will overwrite existing values:

thisdict = {  
  "brand": "Ford",  
  "model": "Mustang",  
  "year": 1964,  
  "year": 2020  
}  
print(thisdict)