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

* <class 'dict'>

Constructor

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

{'name': 'John', 'age': 36, 'country': 'Norway'}

# **Access Dictionary Items**

thisdict = {  
  "brand": "Ford",  
  "model": "Mustang",  
  "year": 1964  
}  
x = thisdict["model"]

or

x = thisdict.get("model")

list of all the keys in the dictionary.

x = thisdict.keys()

## Get Items

Get a list of the key:value pairs

changes done to the dictionary will be reflected in the items list

x = thisdict.items()

## Check if Key Exists

if "model" in thisdict:  
  print("Yes, 'model' is one of the keys in the thisdict dictionary")

# **Change Dictionary Items**

## Change Values

thisdict = {  
  "brand": "Ford",  
  "model": "Mustang",  
  "year": 1964  
}  
thisdict["year"] = 2018

## Update Dictionary

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

# **Add Dictionary Items**

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

or

thisdict = {  
  "brand": "Ford",  
  "model": "Mustang",  
  "year": 1964  
}  
thisdict.update({"color": "red"})

# **Remove Dictionary Items**

removes the item with the specified key name

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

removes the last inserted item

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

removes the item with the specified key name:

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

empty the dictionary

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

# **Loop Dictionaries**

Print all key names in the dictionary, one by one:

for x in thisdict:  
  print(x)

Print all values in the dictionary, one by one:

for x in thisdict:  
  print(thisdict[x])

return values of a dictionary:

for x in thisdict.values():  
  print(x)

Loop through both *keys* and *values*:

for x, y in thisdict.items():  
  print(x, y)

Copy Dictionaries

mydict = thisdict.copy()  
print(mydict)

mydict = dict(thisdict)  
print(mydict)

Nested Dictionaries

dictionary can contain dictionaries, this is called nested dictionaries

child1 = {  
  "name" : "Emil",  
  "year" : 2004  
}  
child2 = {  
  "name" : "Tobias",  
  "year" : 2007  
}  
child3 = {  
  "name" : "Linus",  
  "year" : 2011  
}  
  
myfamily = {  
  "child1" : child1,  
  "child2" : child2,  
  "child3" : child3  
}

print(myfamily["child2"]["name"])