

12- dictionary

March 6, 2023

1 creating a dictionary

```
[2]: newcars = {  
      "brand": "bmw",  
      "model" : "x5",  
      "year": 2017  
    }  
  
    print(newcars)
```

```
{'brand': 'bmw', 'model': 'x5', 'year': 2017}
```

```
[3]: type(newcars)
```

```
[3]: dict
```

```
[4]: len(newcars)
```

```
[4]: 3
```

```
[6]: print(newcars["brand"])
```

```
bmw
```

```
[8]: x = newcars.get("brand")  
    print(x)
```

```
bmw
```

```
[10]: x = newcars.keys()  
    print(x)
```

```
dict_keys(['brand', 'model', 'year'])
```

```
[11]: #adding items to a dictionary  
    newcars["color"] = "black"  
    print(newcars)
```

```
{'brand': 'bmw', 'model': 'x5', 'year': 2017, 'color': 'black'}
```

```
[12]: #print all the valules at once  
x = newcars.values()  
print(x)
```

```
dict_values(['bmw', 'x5', 2017, 'black'])
```

```
[14]: #changing value  
newcars["year"] = 2020  
print(newcars)
```

```
{'brand': 'bmw', 'model': 'x5', 'year': 2020, 'color': 'black'}
```

```
[16]: #items in dictionary as tuple in a list  
x = newcars.items()  
print(x)
```

```
dict_items([('brand', 'bmw'), ('model', 'x5'), ('year', 2020), ('color',  
'black')])
```

```
[18]: if "color" in newcars:  
      print("Yes, color is in new cars")
```

```
Yes, color is in new cars
```

```
[20]: newcars.update({"color": "white"})  
print(newcars)
```

```
{'brand': 'bmw', 'model': 'x5', 'year': 2020, 'color': 'white'}
```

```
[21]: #removing item  
newcars.pop("year")  
print(newcars)
```

```
{'brand': 'bmw', 'model': 'x5', 'color': 'white'}
```

```
[22]: #removes last inserted item  
newcars.popitem()  
print(newcars)
```

```
{'brand': 'bmw', 'model': 'x5'}
```

```
[23]: del newcars["brand"]  
print(newcars)
```

```
{'model': 'x5'}
```

```
[24]: #empty  
newcars.clear()
```

```
[25]: print(newcars)
```

```
{}
```

```
[26]: del newcars
```

```
[27]: print(newcars)
```

```
-----  
NameError                                Traceback (most recent call last)  
/var/folders/6t/xy3pcrwn7r50cmfvm_58m4xm0000gn/T/ipykernel_3576/507305471.py in  
↳<module>  
----> 1 print(newcars)  
  
NameError: name 'newcars' is not defined
```

```
[ ]:
```