

Assignment Set

Dictionary

NAME : Lovenish Gaur

Dictionary

A dictionary is a collection which is unordered, changeable and indexed. In Python dictionaries are written with curly brackets, and they have keys and values.

1. `clear()` - Removes all the elements from the dictionary
2. `copy()` -Returns a copy of the dictionary
3. `fromkeys()` - Returns a dictionary with the specified keys and value
4. `get()` - Returns the value of the specified key
5. `items()` - Returns a list containing a tuple for each key value pair
6. `keys()` - Returns a list containing the dictionary's keys
7. `pop()` - Removes the element with the specified key
8. `popitem()` - Removes the last inserted key-value pair
9. `setdefault()` - Returns the value of the specified key. If the key does not exist: insert the key, with the specified value
10. `update()` - Updates the dictionary with the specified key-value pairs
11. `values()` - Returns a list of all the values in the dictionary

In [11]:

```
dict = {  
    "Company": "USA",  
    "Speciality": "Mustang",  
    "Location": "Netherland",  
    "Founder": "Henry Ford",  
    "Year" : 1989,  
    "Revenue" : 417323500000.00  
}  
dict
```

Out[11]:

```
{'Company': 'USA',  
'Speciality': 'Mustang',  
'Location': 'Netherland',  
'Founder': 'Henry Ford',  
'Year': 1989,  
'Revenue': 417323500000.0}
```

In [12]:

```
#copy() -Returns a copy of the dictionary  
Details = dict.copy()  
Details
```

Out[12]:

```
{'Company': 'USA',  
 'Speciality': 'Mustang',  
 'Location': 'Netherland',  
 'Founder': 'Henry Ford',  
 'Year': 1989,  
 'Revenue': 417323500000.0}
```

In [30]:

```
#fromkeys() - Returns a dictionary with the specified keys and value  
Name = ("Maruti", "Mahindra", "Ford", "Ferrari", "Corvette", "Hundayi", "Volkswagon")  
Average =(23.4, 20.8)  
Cars_Average = dict.fromkeys(Name, Average)  
Cars_Average
```

Out[30]:

```
{'Maruti': (23.4, 20.8),  
 'Mahindra': (23.4, 20.8),  
 'Ford': (23.4, 20.8),  
 'Ferrari': (23.4, 20.8),  
 'Corvette': (23.4, 20.8),  
 'Hundayi': (23.4, 20.8),  
 'Volkswagon': (23.4, 20.8)}
```

In [33]:

```
#get()- Returns the value of the specified key  
Test1 = Cars_Average.get("Maruti")  
Test1
```

Out[33]:

```
(23.4, 20.8)
```

In [35]:

```
# items()- Returns a list containing a tuple for each key value pair  
new = Cars_Average.items()  
new
```

Out[35]:

```
dict_items([('Maruti', (23.4, 20.8)), ('Mahindra', (23.4, 20.8)), ('Ford', (23.4, 20.8)), ('Ferrari', (23.4, 20.8)), ('Corvette', (23.4, 20.8)), ('Hundayi', (23.4, 20.8)), ('Volkswagon', (23.4, 20.8))])
```

In [36]:

```
#keys() - Returns a list containing the dictionary's keys  
new1 = Cars_Average.keys()  
new1
```

Out[36]:

```
dict_keys(['Maruti', 'Mahindra', 'Ford', 'Ferrari', 'Corvette', 'Hundayi', 'Volkswagon'])
```

In [37]:

```
#pop()- Removes the element with the specified key  
new3 = Cars_Average.pop("Hundayi")  
new3
```

Out[37]:

```
(23.4, 20.8)
```

In [38]:

```
Cars_Average
```

Out[38]:

```
{'Maruti': (23.4, 20.8),  
 'Mahindra': (23.4, 20.8),  
 'Ford': (23.4, 20.8),  
 'Ferrari': (23.4, 20.8),  
 'Corvette': (23.4, 20.8),  
 'Volkswagon': (23.4, 20.8)}
```

In [39]:

```
#popitem()- Removes the last inserted key-value pair  
new4 = Cars_Average.popitem()  
new4
```

Out[39]:

```
('Volkswagon', (23.4, 20.8))
```

In [40]:

```
Cars_Average
```

Out[40]:

```
{'Maruti': (23.4, 20.8),  
 'Mahindra': (23.4, 20.8),  
 'Ford': (23.4, 20.8),  
 'Ferrari': (23.4, 20.8),  
 'Corvette': (23.4, 20.8)}
```

In [54]:

```
#setdefault()- Returns the value of the specified key.  
#If the key does not exist: insert the key, with the specified value  
  
new5 = Cars_Average.setdefault("Maruti" , (25.6, 23.4))  
new5
```

Out[54]:

```
(23.4, 20.8)
```

In [63]:

```
#setdefault()-update()- Updates the dictionary with the specified key-value pairs  
new6 = Cars_Average.update({"Ford": (25.7, 23.4)})  
Cars_Average
```

Out[63]:

```
{'Maruti': (23.4, 20.8),  
 'Mahindra': (23.4, 20.8),  
 'Ford': (25.7, 23.4),  
 'Ferrari': (23.4, 20.8),  
 'Corvette': (23.4, 20.8)}
```

In [65]:

```
#values() - Returns a list of all the values in the dictionary  
new7 = Cars_Average.values()  
new7
```

Out[65]:

```
dict_values([(23.4, 20.8), (23.4, 20.8), (25.7, 23.4), (23.4, 20.8),  
(23.4, 20.8)])
```

In []: