

Updating Dictionaries

In this notebook we see how a dictionary can be updated. This includes:

1. Adding a new `key:value` pair
2. Changing the value associated with an existing key
3. removing a `key:value` pair using the `del` operator
4. Clearing the contents of the entire dictionary using the `clear()` method
5. Deleting the entire dictionary using the `del` operator

You can update a dictionary by modifying an existing entry

In [1]:

```
dict = {'Name': 'Zara', 'Age': 7, 'Class': 'First'}
print(dict)
dict['Age'] = 8
print(dict)
```

```
{'Name': 'Zara', 'Age': 7, 'Class': 'First'}
{'Name': 'Zara', 'Age': 8, 'Class': 'First'}
```

You can update a dictionary by adding a new entry or a `key-value` pair

In [2]:

```
dict = {'Name': 'Zara', 'Age': 7, 'Class': 'First'}
dict['School'] = "DPS School"
print(dict)

dict['College'] = 'IIMB'
print(dict)
```

```
{'Name': 'Zara', 'Age': 7, 'Class': 'First', 'School': 'DPS School'}
{'Name': 'Zara', 'Age': 7, 'Class': 'First', 'School': 'DPS School', 'College': 'IIMB'}
```

You can update a dictionary by deleting an existing entry using the key together with the `del` operator

In [3]:

```
dict = {'Name': 'Zara', 'Age': 7, 'Class': 'First', 'Type': 'hello'}

del dict['Class'] # remove entry with key 'Class'
print(dict)

del (dict['Name'], dict['Type']) #Removing multiple entries in one statement
print(dict)
```

```
{'Name': 'Zara', 'Age': 7, 'Type': 'hello'}
{'Age': 7}
```

Use the `clear()` method to remove all elements in a dictionary. Note that this removes all entries from a dictionary but the dictionary still exists.

In [4]:

```
my_dict = { 'chuck' : 1 , 'fred' : 42, 'jan': 100}
print(my_dict)
my_dict.clear()
print(my_dict) #Prints an empty dictionary
```

```
{'chuck': 1, 'fred': 42, 'jan': 100}
```

```
{}
```

Use the `del` operator to delete the dictionary completely. This deletes the dictionary and it no longer exists.

In [5]:

```
my_dict = { 'chuck' : 1 , 'fred' : 42, 'jan': 100}
print(my_dict)
del my_dict
print(my_dict) # Will return an error since the dictionary object no longer exists.
```

```
{'chuck': 1, 'fred': 42, 'jan': 100}
```

```
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NameError                                Traceback (most recent call last)
<ipython-input-5-3a18fdb84e4c> in <module>
      2 print(my_dict)
      3 del my_dict
----> 4 print(my_dict) # Will return an error since the dictionary object no longer exists.

NameError: name 'my_dict' is not defined
```