

# 12. DICTIONARY

Each key is separated from its value by a colon (:), the items are separated by commas, and the whole thing is enclosed in curly braces. An empty dictionary without any items is written with just two curly braces, like this: {}.

Keys are unique within a dictionary while values may not be. The values of a dictionary can be of any type, but the keys must be of an immutable data type such as strings, numbers, or tuples.

## Accessing Values in Dictionary

---

To access dictionary elements, you can use the familiar square brackets along with the key to obtain its value. Following is a simple example:

```
#!/usr/bin/python

dict = {'Name': 'Zara', 'Age': 7, 'Class': 'First'};

print "dict['Name']: ", dict['Name'];
print "dict['Age']: ", dict['Age'];
```

When the above code is executed, it produces the following result:

```
dict['Name']:  Zara
dict['Age']:   7
```

If we attempt to access a data item with a key, which is not part of the dictionary, we get an error as follows:

```
#!/usr/bin/python

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