### **Dictionaries**

## **Creation of New Dictionary**

> To create a new dictionary in Python, you can use curly braces {} and specify key-value pairs within them. For example:

```
my_dict = {'key1': 'value1', 'key2': 'value2'}
```

### Accessing Items in the Dictionary\

> You can access values in a dictionary by referencing the key associated with the value. For example:

```
value = my_dict['key1']
```

# **Change Values in the Dictionary**

> To change the value of a specific key in a dictionary, you can simply assign a new value to that key. For example:

```
my_dict['key1'] = 'new_value'
```

# **Loop Through a Dictionary Values**

You can loop through the values of a dictionary using a for loop. For example:

```
for value in my_dict.values():
    print(value)
```

# **Check if Key Exists in the Dictionary**

> You can check if a key exists in a dictionary using the in keyword. For example:

```
if 'key1' in my_dict:
    print('Key exists!')
```

### **Checking for Dictionary Length**

> You can find the length of a dictionary using the len() function. For example:

```
length = len(my_dict)
```

#### **Adding Items in the Dictionary**

> To add a new key-value pair to a dictionary, you can simply assign a value to a new key. For example:

```
my_dict['new_key'] = 'new_value'
```

#### Removing Items in the Dictionary

> You can remove items from a dictionary using various methods like pop(), popitem(), or clear(). For example:

```
my_dict.pop('key1')
```

### Remove an Item Using del Statement

➤ In Python, you can remove an item from a list using the del statement. The del statement removes the item at a specific index from the list. Here is an example of how you can use the del statement to remove an item from a list:

```
# Create a list
my_list = [1, 2, 3, 4, 5]

# Remove the item at index 2 (which is 3 in this case)
del my_list[2]

# Print the updated list
print(my_list)
```

### The dict() Constructor

> You can create a dictionary using the dict() constructor by passing key-value pairs as arguments. For example:

```
new_dict = dict(key1='value1', key2='value2')
```

# **Dictionary Methods**

> Python dictionaries have built-in methods like keys(), values(), and items() for accessing keys, values, and key-value pairs respectively.

# Jupyter notebook

# **Adding Folder**

> You can add a folder in Jupyter Notebook by creating a new directory within the Jupyter environment.

#### **Adding Text file**

> To add a text file in Jupyter Notebook, you can use the Jupyter interface to upload or create a new text file

### **CSV** file for data analysis and visualization

> CSV files are commonly used for data analysis and visualization in Jupyter Notebook. You can import CSV files using libraries like pandas and perform data analysis.

#### **Import libraries**

In Jupyter Notebook, you can import libraries like pandas, numpy, matplotlib, and seaborn for data analysis and visualization.

#### Finding data

> You can find data for analysis from various sources like online datasets, APIs, or by creating your own datasets.

#### Importing data

> To import data into Jupyter Notebook, you can use libraries like pandas to read data from CSV files, Excel files, databases, or web sources.

#### **Data attributes**

➤ Data attributes in Jupyter Notebook refer to the characteristics and properties of the dataset being analyzed, such as columns, rows, data types, and values.