Day 3 – DICTIONARY, SETS

Dictionary:

• Python provides another composite datatype called a dictionary, which is similar to a list in that it is a collection of objects.

• A dictionary consists of a collection of key-value pairs. Each key-value pair maps the key to its associated value.

• Dictionary can be defined by enclosing a comma-separated list of key-value pairs in curly braces ({}). A colon (:) separates each key from its associated value

• A value is retrieved from a dictionary by specifying its corresponding key in square brackets

• Adding an entry to an existing dictionary is simply a matter of assigning a new key and value

• If you want to update an entry, you can just assign a new value to an existing key

• Delete an entry, use the del statement, specifying the key to delete

• There is no restrictions on dictionary values.A dictionary value can be any type of ob-ject Python supports, including mutable types like lists and dictionaries, and user-defined objects

• a given key can appear in a dictionary only once. Duplicate keys are not allowed

• dictionary key must be of a type that is immutable. A tuple can also be a dictionary key, because tuples are immutable

Sets:

• A set is a collection which is unordered and unindexed. In Python, sets are written with curly brackets.

Example: CSK = {"dhoni", "bravo", "jadeja"}

• Set cannot access items in a set by referring to an index or a key.

• To add one item to a set use the add() method& To add more than one item to a set use the update() method.

• Remove an item in a set, use the remove(), or the discard() method.

Exercise:

1) Write a Python script to merge two Python dictionaries

In [9]:
```
script1 = {"Mumbai" : "Maharashtra",
           "Kolkata" : "Bengal",
           "Surat" : "Gujarat"}
script2 = {"Pune" : "Maharashtra",
           "Indore" : "Madhya Pradesh"}
script1.update(script2)
print(script1)
```

```
{'Mumbai': 'Maharashtra', 'Kolkata': 'Bengal', 'Surat': 'Gujarat', 'Pune': 'Mah
arashtra', 'Indore': 'Madhya Pradesh'}
```

2) Write a Python program to remove a key from a dictionary

In [10]:
```
del script2['Pune']
print(script2)
```

```
{'Indore': 'Madhya Pradesh'}
```

3) Write a Python program to map two lists into a dictionary

In [11]:
```
City = ["Nagpur", "Chennai", "Bangalore"]
State = ["Maharashtra", "TN", "Karnataka"]
script = dict(zip(City, State))
print(script)
```

```
{'Nagpur': 'Maharashtra', 'Chennai': 'TN', 'Bangalore': 'Karnataka'}
```

4) Write a Python program to find the length of a set

In [13]:
```
names = {"Aakanksha", "Aman", "Aahana", "Jay"}
print(len(names))
```

```
4
```

5) Write a Python program to remove the intersection of a 2nd set from the 1st set

In [15]:
```
moreNames = {"Archies", "Aakanksha", "Aman", "Aaryan", "Amruta"}
intersectedNames = names.intersection(moreNames)
print(intersectedNames)
```

```
{'Aakanksha', 'Aman'}
```

Completed Day 1's notes & exercises

THANK YOU!

Check out My Repository at https://github.com/AakankshaJarode/BestEnlist_Python_Internship.git (https://github.com/AakankshaJarode/BestEnlist_Python_Internship.git)

Chech out My LinkedIn Page at https://www.linkedin.com/in/aakanksha-jarode-1b0195179 (https://www.linkedin.com/in/aakanksha-jarode-1b0195179)