

# SE-(AI&DS)-Nihaal\_Gharat-19

## Strings in Python

```
In [ ]: # Assigning string to a variable
a = 'This is a string'
print (a)
b = "This is a string"
print (b)
c = '''This is a string'''
print (c)
```

This is a string  
This is a string  
This is a string

## Lists in Python

```
In [ ]: # Declaring a list
L = [1, "a" , "string" , 1+2]
print (L)
#Adding an element in the list
L.append(6)
print (L)
#Deleting last element from a list
L.pop()
print (L)
#Displaying Second element of the list
print (L[1])
```

[1, 'a', 'string', 3]  
[1, 'a', 'string', 3, 6]  
[1, 'a', 'string', 3]  
a

## Tuples in Python

```
In [ ]: tup = (1, "a", "string", 1+2)
print(tup)
print(tup[1])
```

(1, 'a', 'string', 3)  
a

## Dictionaries in Python

A Python dictionary is a data structure that stores the value in key: value pairs. Values in a dictionary can be of any data type and can be duplicated, whereas keys can't be repeated and must be immutable.

```
In [ ]: d = {1: 'Lorem', 2: 'Ipsum', 3: 'Dolerum'}
print(d)
```

{1: 'Lorem', 2: 'Ipsum', 3: 'Dolerum'}

### Create a Dictionary

```
In [ ]: # create dictionary using { }
d1 = {1: 'Game', 2: 'of', 3: 'Thrones'}
print(d1)

# create dictionary using dict() constructor
d2 = dict(a = "House", b = "of", c = "Cards")
print(d2)
```

{1: 'Game', 2: 'of', 3: 'Thrones'}  
{'a': 'House', 'b': 'of', 'c': 'Cards'}

### Accessing Dictionary Items

```
In [ ]: d = { "name": "Alice", 1: "Python", (1, 2): [1,2,4] }

# Access using key
print(d["name"])

# Access using get()
print(d.get("name"))
```

Alice  
Alice

## Adding and Updating Dictionary Items

```
In [ ]: d = {1: 'Game', 2: 'of', 3: 'Thrones'}

# Adding a new key-value pair
d["age"] = 22

# Updating an existing value
d[1] = "Python dict"

print(d)

{1: 'Python dict', 2: 'of', 3: 'Thrones', 'age': 22}
```

## Deleting an item from the dictionary

```
In [ ]: d = {1: 'borderland', 2: 'no', 3: 'Arisu'}
del d[2]
print(d)

{1: 'borderland', 3: 'Arisu'}
```

```
In [ ]:
```