Python Literals

Literals can be defined as a data that is given in a variable or constant.

Python support the following literals:

I. String literals:

String literals can be formed by enclosing a text in the quotes. We can use both single as well as double quotes for a String.

Eg:

"Aman" , '12345'

Types of Strings:

There are two types of Strings supported in Python:

a).Single line String- Strings that are terminated within a single line are known as Single line Strings.

Eg:

1. >>> text1='hello'

b).Multi line String- A piece of text that is spread along multiple lines is known as Multiple line String.

There are two ways to create Multiline Strings:

1). Adding black slash at the end of each line.

Eg:

1. >>> text1='hello\
2. user'
3. >>> text1
4. 'hellouser'
5. >>>

2).Using triple quotation marks:-

Eg:

1. >>> str2=''
2. >>> print str2
3. welcome
4. to
5. SSSIT
6. >>>

II.Numeric literals:

Numeric Literals are immutable. Numeric literals can belong to following four different numerical types.

Int(signed integers)	Long(long integers)	float(floating point)	Complex(complex)
Numbers(can be both positive and negative) with no fractional part.eg: 100	Integers of unlimited size followed by lowercase or uppercase L eg: 87032845L	Real numbers with both integer and fractional part eg: -26.2	In the form of a+bj where a forms the real part and b forms the imaginary part of complex number. eg: 3.14j

III. Boolean literals:

A Boolean literal can have any of the two values: True or False.

IV. Special literals.

Python contains one special literal i.e., None.

None is used to specify to that field that is not created. It is also used for end of lists in Python.

Eg:

1. >>> val1=10
2. >>> val2=None
3. >>> val1
4. 10
5. >>> val2
6. >>> print val2
7. None
8. >>>

V.Literal Collections.

Collections such as tuples, lists and Dictionary are used in Python.

List:

- List contain items of different data types. Lists are mutable i.e., modifiable.
- The values stored in List are separated by commas(,) and enclosed within a square brackets([]). We can store different type of data in a List.
- Value stored in a List can be retrieved using the slice operator([] and [:]).
- The plus sign (+) is the list concatenation and asterisk(*) is the repetition operator.

Eg:

1. >>> list=['aman',678,20.4,'saurav']
2. >>> list1=[456,'rahul']
3. >>> list
4. ['aman', 678, 20.4, 'saurav']
5. >>> list[1:3]
6. [678, 20.4]
7. >>> list+list1
8. ['aman', 678, 20.4, 'saurav', 456, 'rahul']
9. >>> list1*2
10. [456, 'rahul', 456, 'rahul']
11. >>>