String :-

→ String is non-numeric data type.

→ String is a collection of characters. These characters can be alphabets, digits or special characters.

→ String which consists of alphabets is called alphabetic string.

→ String which consists of alphabets or digits is called alphanumeric string.

→ String is a collection type or sequence type.

→ String is an immutable sequence data type.

→ In python string is represented :-

   i) within single quotes.

   ii) within double "

   iii) within triple single quotes or double quotes.

* within single quotes, python programmer represent single line string.

* within single quotes, we can insert double quotes.

Eg :-
```
>>> S1 = "Python"
>>> S1
    "python"
```

Eg :-
```
>>> S2 = 'Python 3.12'
>>> S2
    'Python 3.12'
```

Eg :-
```
>>> S3 = '45'
>>> n1 = 45
>>> n1 + 40

    95

>>> S3 + 10
    └→ Error.
        (string + int cannot concetae).
```

1

```
>>> S4 = 'Python is "high" programming lang'
    Print(S4)

>>> S5 = 'Python is a 'high level' progr. lang'
    SyntaxError: invalid syntax.

>>> S6 = 'Python is a
    Syntax Error:- invalid syntax,

>>> Str1 = 'Python'
>>> print(Str1)
    Python

>>> Str2 = "python 3.12"
>>> Print(Str2)
    Python 3.12

>>> Str3 = "45"
>>> print(Str3)
    45.

>>> Str4 = " Python is high level.
    Syntax Error!- incomplete input.

>>> Str5 = "Python is 'high level' prog. lang".
>>> print(Str5)
    Python is 'high level' prog. lang.
```

within triple single quotes or double quots : we can represent multiline String.

```
>>> S1 = "suresh"
>>> S1
    suresh.

>>> Roll no = 24
>>> Rollno
    24.
```
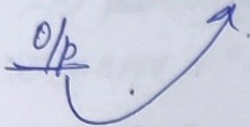
Eg:- triple single quotes.

```
>>> Str1 = ''' Python is a programming language
              which consists 5 Module
              Module1. Python
              Module2. Datbase
              Module3: UI
              Module 4: Backend
              Module5 : Tools '''
```

O/p ↗

Eg:-

```
>>> Str2 = """ Python is
               a programming
               language """
>>> Str2
```

O/p Python is
    a programming
    language.

How we write comments in python?

- In python comments are created using # (pound sign)
- It is used to create ⟨single⟩ line comment.
- Python doesn't support multiple line comments.

Eg. test.Py

```
# This is my first prog. in python.
>> print("hellonJ")
```

O/p hellonJ.

Eg2:- Test2.Py

```
a = ''' Python is a prog. lang '''
print("Hello")
print(a)
```

O/p: Hello
     Python is a prog. lang.

* Indent → space
  → indentation.

Indent:- Space given at the begning of the statement is called Indent.

*Indent is used to create Block.

Note:-
Every program required 3 thing:-
  1) Output
  2) Input
  3) Process.

Print ()
→ Print () is a predefined function in python.
→ print() is a standard o/p function, this function is used to print data or information on console/monitor.
→ print function required input to print data or information.
→ print function is having 3 ~~values~~ inputs.

  1) data/values
  2) Sepreator (sep)
  3) end.

o if no input is given to print function, it insert blank lines.   01/11/23 wed

  ex:- print() ⎫
        print() ⎬ each print give 1 blank o/p.
        print() ⎪
        print() ⎭

eg:- For printing more than 1 value:-
  >>> print(10,20,30,40,50) → seperated by comma.
  >>> print(1,"hello" "world", 2000.0)
  >>> print(10,20,30,40,50, sep="$")
                              ↓
                         seperated by dollar sign.

4