

In [ ]: String -

- String **is** the Sequence of characters
- String **is** built-in data **type** of python
- String **is** the immutable data **type**
- A characters **is** simply a symbol
- 26 Characters

```
In [2]: print(999)
        print(type(999))

        print("999")
        print(type("999"))
```

```
999
<class 'int'>
999
<class 'str'>
```

```
In [11]: my_string = 'hello'
        print(my_string)

        my_string2 = "hello"
        print(my_string2)

        my_string3 = '''hello'''
        print(my_string3)

        my_string4 = """hello"""
        print(my_string4)

        my_string5 = """hello, welcome to
                        the world of the python"""
        print(my_string5)
```

```
hello
hello
hello
hello
hello, welcome to
                        the world of the python
```

In [18]: *# Unpacking characters*

```
lang = "python"
```

```
a = lang
print(a)
```

```
a,b,c,d,e,f = lang
print(a)
print(d)
print(f)
```

```
python
p
h
n
```

In [26]: *# How to access characters in a string?*

```
lang = "python"
```

```
# total values of length
len(lang)
```

```
# Sting can be indexed with square bracket, indexing starts from zero in python
```

```
# -----> Forward Indexing start from 0,1,2,3.....
```

```
print(lang[0])
print(lang[4])
print(lang[5])
```

```
print("=====")
```

```
# -----> Backward Indexing start from -1,-2,-3.....
```

```
print(lang[-1]) # last value of the item
print(lang[-2])
print(lang[-5])
```

```
p
o
n
=====
n
o
y
```

In [27]: **for** w **in** lang:  
          print(w)

```
p
y
t
h
o
n
```

```
In [29]: for w in lang[::-1]:  
         print(w)
```

n  
o  
h  
t  
y  
p

```
In [ ]: # How to slice a string in python  
  
#syntax  
  
str[start:stop:step]  
#other syntax of slice:  
  
str[start:stop] # items start through stop -1    #- count -1 (Len function is un  
str[start:]    ##items start through the rest of values  
str[: stop]    #items from beginning through stop -1  
str[:]        - #a copy of whole values
```

```
In [34]: lang[0:6:1]
```

```
Out[34]: 'python'
```

```
In [38]: lang[0:4]
```

```
Out[38]: 'pyth'
```

```
In [41]: lang[4:]
```

```
Out[41]: 'on'
```

```
In [42]: lang[:2]
```

```
Out[42]: 'py'
```

```
In [43]: lang[:]
```

```
Out[43]: 'python'
```

In [50]: *# split*

```
name = "I love my country"
names = name.split() # by default split " "(space)
print(names)

name2 = "I,love,my,country"
names2 = name2.split(",") # by default split " "(space)
print(names2)

name3 = "I-love-my-country"
names3 = name3.split("-") # by default split " "(space)
print(names3)
```

```
['I', 'love', 'my', 'country']
['I', 'love', 'my', 'country']
['I', 'love', 'my', 'country']
```

In [51]: names3

Out[51]: ['I', 'love', 'my', 'country']

In [56]: *# join*

```
print(''.join(name))
print(''.join(name))
```

```
I love my country
I love my country
```

In [62]: *# How to change or delete in string?*

```
my_string = "python"
#my_string[0] = "m"
#del my_string[0]
# delete variable need to deleted
del my_string
```

In [64]: my\_string = "python"

```
my_string.replace('p','m')
```

Out[64]: 'mython'

In [66]: *# Python Oerations*

```
a = "hello"
b = "world"

print(a + b)
print(a + " " + b)
```

helloworld  
hello world

In [70]: `print("999" + "9")`

9999

In [71]: `print("555" + "555")`

555555

In [72]: `print(eval("555") + eval("555"))`

1110

In [75]: `print(a * 10)`

hellohellohellohellohellohellohellohellohello

In [76]: `print(" Amit " * 2)`

Amit Amit

In [77]: `a + b`

Out[77]: 'helloworld'

In [78]: *# membership operater*

```
in , not in
```

Out[78]: 'python'

In [79]: `for w in lang:`  
          `print(w)`

p  
y  
t  
h  
o  
n

```
In [85]: str1 = "hello world"
str2 = "hello"

print("hello" in str1 )
print("hello1" not in str1 )
```

True

True

```
In [86]: "hello" in str2
```

Out[86]: True

```
In [87]: print("hello" == "hello")
```

True

```
In [ ]:
```