**Python String**

Strings in python are surrounded by either single quotation marks, or double quotation marks.

*#String*x="Hello"  
print(x)*#Hello*y='Chavo'  
print(y)*#Chavo*

Strings are immutable which means once the string is created it can’t be modified.

Id() is used to retrieve the memory address of the string from the memory.

*#Get the ids of both strings which are same*myString1="Hello Sheran"  
myString2="Hello Sheran"  
print(id(myString1),id(myString2))*#1885197268848 1885197268848*

Modify one of the string and check the id of both

*#Modify one of the string and check the id of both*myString1="Hello Sheran"  
myString2="Hello Sheran again"  
print(id(myString1),id(myString2))*#1472024508272 1472024763872*

**Multiline string** - can assign a multiline string to a variable by using three quotes or three single quotes:

*#Multiline string*a = """Lorem ipsum dolor sit amet,  
consectetur adipiscing elit,  
sed do eiusmod tempor incididunt  
ut labore et dolore magna aliqua."""  
print(a)

**Strings are array**

* Arrays of bytes representing Unicode characters.
* A single character is simply a string with a length of 1.
* Square brackets can be used to extract the character of the string is called slicing.

**Slicing**

Specify the start index and the end index, separated by a colon, to return a part of the string.

*#Slicing*

*#Get the character at position 4*myString="Hello Sheran"  
print(myString[4])*#o*

*# Get the character from 2 to 5(5 is usually not included)*print(myString[2:5])*#ll0  
#Get the character from start to 5(5 is usually not included)*print(myString[:5])*#Hello  
#Get the character from 2 to the end*print(myString[2:])*#llo Sheran  
#Negative Indexing- Get the character from a in Sheran to e in Hello*print(myString[-10:-0])*#llo Sheran*

**Looping through a string**- Since strings are arrays, we can loop through the characters in a string, with a for loop.

myString="Hello Sheran"

for i in myString:  
 print(i, myString.index(i))

output is:

H 0

e 1

l 2

l 2

o 4

5

S 6

h 7

e 1

r 9

a 10

n 11

**+ and \* operators on string**

+ operator — used to concatenate two or more strings

*#+ operator — used to concatenate two or more strings*s = "Python"  
print(s + "is an easy language") *#Pythonis an easy language*

\* Operator — used to repetition of strings

*#\* Operator — used to repetition of strings*

s = "Python"print(s\*3)*#PythonPythonPython*

**String functions**

ord() — returns the ASCHII key of the character

*#ord() — returns the ASCHII key*a="String"  
print(ord('S')) *#83*

chr() — returns the character that represented by the ASCHII key

*# chr() — returns the character*a="String"  
print(chr(83))*#S*

Len()—To get the length of a string

*#Len()—To get the length of a string*

a="String"print(len(a))*#6*

max()—returns the character that having highest ASCHII value

a="String"

max\_character=max(a)  
print(max\_character, ord(max\_character)) *# t 116*

min()—returns the character that having lowest ASCHII value

a="String"

min\_character=min(a)  
print(min\_character, ord(min\_character)) *# s 83*

**“in” and “not in” keywords**

Check certain phrase or character presents in a string using “in” and “not in” keywords.

a="String"  
print( "ing" in a)*#True*print("abc" not in a)*#True*