Strings in Python

In [7]:
```
str1 = '''Hello World
                    How are you dear'''
str2 = "My name is Muhammad Iqbal, I am Bascially from Tunsa shareef and graduated
str3 = "I'm currently working as an SQA Engineer"
print(str3)
print(str1)
```

```
I'm currently working as an SQA Engineer
Hello World
                    How are you dear
```

Accessing character of a Sequence (String, Tuple, List)

In [13]:
```
str1[1]
str2[-3]
print("str1[1]", str1[1])
```

```
str1[1] e
```

In [15]:
```
# To find the index of a character in a string
print("index of l in str1", str1.index('l'))
```

```
index of l in str1 2
```

Strings are immutable

In [25]:
```
# str1[3] = 'l'            # As strings are immutable, so we cannnot change a strir
str5 = "Iqbal"
print(id(str5))
str5 = "Afzal"
print(id(str5))           # both str5 point to different locations, now only "afzal
```

```
2280041198576
2280040405232
```

Slicing a String

- **string[start:end:step]**
- **End point is exclusive, end point will not be included**

In [34]:
```
str1 = "Hy! I am using watsap only"
print (str1[2::2])
print(str1[2:7])
print(str1[::-1])
print(str1[5::-1])
```

```
!Ia sn aspol
! I a
ylno pastaw gnisu ma I !yH
 I !yH
```

String Concatenation

In [42]:
```
str1 = "Hello"
str2 = "World"
print(str1 + str2)
str3 = str1 + str2
print(str3)
print ("Iqbal" + str3[1:])
```

```
HelloWorld
HelloWorld
IqbalelloWorld
```

Creating Large String

In [43]:
```
print (str1*100)
```

```
HelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHe
lloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHell
oHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloH
elloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHel
loHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHello
HelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHelloHe
lloHello
```

Python Methods and Difference b/w Method & Functions

- **Methods are the functions defined in the class that can perform actions on the object of that class**
- **Functions are the actions that belong to data thing object**

In [68]:
```
# capitalize()  Converts the first character to upper case and the rest are convert
a = "my name is muhammad iqbal. I am from taunsa shreef"
b = a.capitalize()
print(b)
# count()       Returns the number of times a specified value occurs in a string
# string.count(value, start, end)
b = a.count('f', 0, 50)
print (b)
# endswith()    Returns true if the string ends with the specified value
# string.endswith(value, start, end)
b = a.endswith('shreef', 0, 50)
print(b)
# find()        Searches the string for a specified value and returns the position
# string.find(value, start, end)
b = a.find('f', 0, 50)
print(b)
# format()      Formats specified values in a string
txt1 = "My name is {fname}, I'm {age}".format(fname = "John", age = 36)
txt2 = "My name is {0}, I'm {1}".format("John",36)
txt3 = "My name is {}, I'm {}".format("John",36)
txt5 = "My name is {1}, I'm {0}".format("John",36)
print(txt1)
print(txt2)
print(txt3)
print(txt5)
# join()        Converts the elements of an iterable into a string
myTuple = ("John", "Peter", "Vicky")

x = "#".join(myTuple)
y = " ".join(myTuple)
print(x)
print(y)
```

```
# lower()       Converts a string into lower case
txt = "Hello my FRIENDS"
x = txt.lower()
print(x)
# replace()     Returns a string where a specified value is replaced with a specif
# string.replace(oldvalue, newvalue, count)
txt = "one one was a race horse, two two was one too."
x = txt.replace("one", "three", 2)
print(x)
# split()       Splits the string at the specified separator, and returns a list
txt = "welcome to the jungle"
x = txt.split()
print(x)
# upper()       Converts a string into upper case
txt = "Hello my friends"
x = txt.upper()
print(x)
```

```
My name is muhammad iqbal. i am from taunsa shreef
2
True
32
My name is John, I'm 36
My name is John, I'm 36
My name is John, I'm 36
My name is 36, I'm John
John#Peter#Vicky
John Peter Vicky
hello my friends
three three was a race horse, two two was one too.
['welcome', 'to', 'the', 'jungle']
HELLO MY FRIENDS
```