PYTHON DATA TYPES

1. Numbers
2. Booleans
3. Strings
4. Bytes
5. Lists
6. Arrays
7. Tuples
8. Sets
9. Dictionaries

PYTHON DATA TYPES: NUMBERS

1. can be real number
2. can be complex number

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In [8]:
```
1 print(120) # integar number
```

```
120
```

2. can be complex number

In [9]:
```
1 print(complex( 15.4, -8.5 ))
```

```
(15.4-8.5j)
```

PYTHON DATA TYPES: Booleans

1. Ture = 1
2. False = 0

In [16]:
```
1 print( int(True) ,"   ", int(False) )
```

```
1     0
```

PYTHON DATA TYPES: BYTES

Differences between strings and bytes:

1. Byte object contains sequence of bytes while String contains sequence of characters.

2. Bytes can be read by machines while strings can be read by humans.

3. Bytes is stored directly on machines while strings needs to be encoded first.

PYTHON DATA TYPES: Strings

```
name1 = "sample string"
name2 = 'another sample string'
name3 = """a multiline
  string example"""
```

In [26]:
```
1 string = "my name is Yahia"
2 print(string[0:16:1])
```

```
my name is Yahia
```

Quiz

➔ What is the output of the followingcode?

my_string = "0123456789"

print(my_string[-2: -6: -2])

Solution is: 86

Variables

1. Variables can change type, simply by assigning them a new value ofa different type

In [2]:
```
1 x = 1
2 x = "String value"
3 type(x)
```

Out[2]:
```
str
```

2. Python allows you to assign a single value to severalvariables simultaneously

In [4]:

```
a = b = c = 1
print(a,b,c)
```

```
1 1 1
```

3. You can also assign multiple objects to multiplevariables

In [7]:

```
a , b , c = 4 , 3.2 , "hello"
print(a,b,c)
```

```
4 3.2 hello
```