Don't confused about DATA TYPE and DATA STRUCTURE (Both are same at the end).

Python Data Types

```
"""""""""Integer,
Float,
Boolean,
Text/String,
Complex number,
List,
Tuple,
Set,
Dictionary
None"""""""""
```

1. Integer's

-9,-8,-7,-6, ..., 0, 1, 2, 3, 4, 5, 6, 7, 8, 9

In [9]:
```python
print(type(0),'\n',type(1),'\n', type(2),'\n')
print(type(000),'\n',type(111),'\n', type(999))
```

```
<class 'int'>
 <class 'int'>
 <class 'int'>

<class 'int'>
 <class 'int'>
 <class 'int'>
```

In [10]:
```python
x = 1245
print(type(x))
```

```
<class 'int'>
```

Python can handle 1e power of 308

In [17]:
```python
print(1e308)
```

```
1e+308
```

In [18]:
```python
#python can't handle more then 1*10^309
print(1e309)
```

```
inf
```

It's return 'infinite'

2. Desimal/Float

-5.5, -3.66, 1.5, 0.5, 2.2, 333.2222

In [25]:
```python
print(l, '\n', type(l)) #list is mutable it's created it can change.
```

```
[1, 2, 3, 4, 'hello', 1.5, (5+6j)]
 <class 'list'>
```

7. Tuple

In [26]:
```python
t = (1, 2, 3, 4,'hello', 1.5, (5+6j)) #Tuple is immutable (can't change once it's created
```

In [29]:
```python
print(t,'\n',type(t))
```

```
(1, 2, 3, 4, 'hello', 1.5, (5+6j))
 <class 'tuple'>
```

8. Sets

In [30]:
```python
s = {1,2,3,4,5,6}
```

In [31]:
```python
print(s,'\n', type(s))
```

```
{1, 2, 3, 4, 5, 6}
 <class 'set'>
```

9. Dictionary

In [32]:
```python
d = {'name':'yuvraj',
    'add.':'Delhi',
    'height':5.7,
    }  #It contain Keys values pairs.
```

In [44]:
```python
print(d,'\n',
     '1.',d.keys(),'\n',
     '2.',d.values(),'\n',
     '3.',type(d), '\n',
     )
```

```
{'name': 'yuvraj', 'add.': 'Delhi', 'height': 5.7}
 1. dict_keys(['name', 'add.', 'height'])
 2. dict_values(['yuvraj', 'Delhi', 5.7])
 3. <class 'dict'>
```

10. None

In [50]:
```python
type(None)
```

Out[50]: NoneType

Thank you!

In [1]:
```python
y = 8.17
type(y)
```

Out[1]: float

In [7]:
```python
print(1.7e308)
print(1.7e309)
```

```
1.7e+308
inf
```

3. Boolean

Boolean not take any inverted comas

In [9]:
```python
print('True') X #this is wrong.
```

```
True
```

In [12]:
```python
True, False
```

Out[12]: (True, False)

In [13]:
```python
print(True, '\n', False)
```

```
True
 False
```

In [19]:
```python
type(True)
```

Out[19]: bool

4. Text/String

In [16]:
```python
'hello'
```

Out[16]: 'hello'

In [18]:
```python
z = 'Hello World'
print(type(z))
```

```
<class 'str'>
```

5. Complex

In [22]:
```python
c = 5 + 6j
print(c, '\n',type(c))
```

```
(5+6j)
 <class 'complex'>
```

6. List

In [24]:
```python
l = [1, 2, 3, 4,'hello', 1.5, (5+6j)]   #List can contaim any types of data in array form
```