# Python Basics:

In [19]:

```
a = 20
a
```

Out[19]:

```
20
```

In [6]:

```
b = 23.6
b
```

Out[6]:

```
23.6
```

In [16]:

```
a
b
a
b,a
```

Out[16]:

```
(23.6, 20)
```

In [17]:

```
a = 45
b = 34
a,b
```

Out[17]:

```
(45, 34)
```

In [20]:

```
a,b
```

Out[20]:

```
(20, 34)
```

In [22]:

```
g = 34
h = 13
print(g,h)
g,h
```

```
34 13
```

Out[22]:

```
(34, 13)
```

# Python Data types:

- Integer -> Only for exact integer values(numeric Values)
- Float -> Whole numbers(integer, decimal values)
- String -> Characters,numbers,special characters('' or "")
- Complex -> Real and imaginary part -> [Machine learning {+-}]
- Boolean -> True or False(condition)

In [23]:

```
e = 36
k = 45.987
s = "12"
p = True
print(e,k,s,p)
```

```
36 45.987 12 True
```

In [25]:

```
s
```

Out[25]:

```
'12'
```

In [24]:

```
r,t,w,q = 56,78.90,'45',False
print(r,t,w,q)
```

```
56 78.9 45 False
```

In [27]:

```
e = s = w = 90
print(e,s,w)
```

```
90 90 90
```

# Data Type Checking:

- type() -> To check the data type value what we have assigned to it.

In [31]:

```
p,w,y,c = 34,56.98,'r',True
print(c,p,w,y)
print(p,type(p))
print(w,type(w))
print(y,type(y))
print(c,type(c))
```

```
True 34 56.98 r
34 <class 'int'>
56.98 <class 'float'>
r <class 'str'>
True <class 'bool'>
```

In [34]:

```
ed = "kamal"
er = '34.67'
print(type(ed),type(er))

```

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

# Type Casting:

- Type can be changed from one data type to another data type

In [41]:

```
sd,rt = 34,'67.980'
print(sd,rt)
print(sd,type(sd))
print(rt,type(rt))
print(str(sd),type(str(sd)))
print(float(rt),type(float(rt)))
print(type(sd),type(rt))
print(int(float(rt)),type(int(float(rt))))
print(type(sd),type(rt))
print(float(sd),type(float(sd)))
print(type(sd),type(rt))
```

```
34 67.980
34 <class 'int'>
67.980 <class 'str'>
34 <class 'str'>
67.98 <class 'float'>
<class 'int'> <class 'str'>
67 <class 'int'>
<class 'int'> <class 'str'>
34.0 <class 'float'>
<class 'int'> <class 'str'>
```

In [ ]:

```
1
```