

In [33]:

```

#creating a variable
a =10
print(a)

#printing data type of a
print(type(a))

#type casting to float
b = float(10)
print(type(b))
print(b)

#complex type
c = 8 + 3j
print(type(c))
print(c)

```

```

10
<class 'int'>
<class 'float'>
10.0
<class 'complex'>
(8+3j)

```

In [26]:

```

#String Operations

#Declaring string
aSampleString = "Hello"

#printing Length

print(len(aSampleString))

#Split Operations

aMultiWordString = 'I_love_Python'
print(aMultiWordString.split('_'))

aMultiWordString = 'I am Indian'
print(aMultiWordString.split())

#concatenation
print(aSampleString+" "+aMultiWordString)

#replace
aSample = 'Temate'
print(aSample.replace('e','o'))

#strip
aSample = ' Hello How are you '
print(aSample.strip())

#Declaring MultiLine String
aMultiLineString = '''Hello All ,
How are you doing ?'''
print(aMultiLineString)

```

```
5
['I', 'love', 'Python']
['I', 'am', 'Indian']
Hello I am Indian
Tomato
Hello How are you
Hello All ,
How are you doing ?
```

In [27]:

```
# change this code
mystring = 'hello'
myfloat = 10.0
myint = 20

# testing code
if mystring == "hello":
    print("String: %s" % mystring)
if isinstance(myfloat, float) and myfloat == 10.0:
    print("Float: %f" % myfloat)
if isinstance(myint, int) and myint == 20:
    print("Integer: %d" % myint)
```

```
String: hello
Float: 10.000000
Integer: 20
```

In [30]:

```
mystring = 'hello'
myfloat = 10.0
myint = 20

# testing code
if 'h' in mystring :
    print('Found h in mystring')

if 'a' in mystring :
    print('Found a in mystring')
elif 'e' in mystring:
    print('Found e in mystring')
```

```
Found h in mystring
Found e in mystring
```

In [64]:

```
#Standard Data types
#List
list1 = [1,3,4,5,'Hello']
print(list1)

#print first 3 items
print(list1[0:3])
#print last 2 items
print(list1[3:5])
#print items using negative indxing
print(list1[-3])
#updating List
list1[4] = 'World'
print(list1)

#tuple
```

```
tuple1 =(1,2,3,4,'Hello')
print(tuple1)

#set
Set = {4,3,6.6,"Hello"}
print(Set)

#dictionary
Dictionary = {0:1,1:2,2:'hi'}
print(Dictionary)
print(Dictionary[2])
Dictionary[2] = 'hello'
print(Dictionary[2])
```

```
[1, 3, 4, 5, 'Hello']
[1, 3, 4]
[5, 'Hello']
4
[1, 3, 4, 5, 'World']
(1, 2, 3, 4, 'Hello')
{'Hello', 3, 4, 6.6}
{0: 1, 1: 2, 2: 'hi'}
hi
hello
```

In []:

In []: