Introduction to Python Programming

In [1]:
```
# Case Sensitivity
studentName = 'Effiong'
print(studentName)
```

```
Effiong
```

Variables

Suppose we are told that a student named Seun has a bag containing 3 oranges and 5 eggs. Represent this in code using variables

In [ ]:
```
Variable      Assignment operator             value
studName                =                    'Seun'
numOranges              =                      3
numBags                 =                      1
numEggs                 =                      5
```

In [ ]:
```
# First principle
Naming of Variables

# Variable name should be a little bit discriptive of the type of objects it points to
# camel Cased- the first character of the first word is small letter. all other are capital
# variable names must be short
```

In [4]:
```
studName = 'seun'
numOranges = 3
numBags = 1
numEggs = 5
```

In [6]:
```
myAge = 30
```

In [7]:
```
print(myAge)
```

```
30
```

In [8]:
```
print(numEggs)
```

```
5
```

In [9]:
```
myAge2 = myAge = 30
```

In [10]:
```
print(myAge)
```

```
30
```

In [11]:
```
myAge = 50
```

In [12]:
```
print(myAge)
```

```
50
```

In [13]:
```
print(myAge2)
```

```
30
```

In [ ]:
```
#  public string age = 'today'

age = 4
```

In [14]:
```
age = 30
```

In [15]:
```
type(age)
```

Out[15]:
```
int
```

In [22]:
```
studName = 'seun'
```

In [17]:
```
type(studName)
```

Out[17]:
```
str
```

In [18]:
```
age = 30
type(age)
```

Out[18]:
```
int
```

In [19]:
```
age = 'seun'
type(age)
```

Out[19]:
```
str
```

In [20]:
```
age = 30.0
type(age)
```

Out[20]:
```
float
```

Variable types

In [ ]:
```
int
float
string
list
tuple
sets
dictionaries

```

In [ ]:
```
# agatha has 10,000 pesos
```

In [23]:
```
agathaFund = float(10000)
```

In [24]:
```
agathaFund
```

Out[24]:
```
10000.0
```

In [ ]:
```
#Operators

+
-
*
/
%
//
**
```

In [26]:
```
x = 30
y = 3
```

In [27]:
```
x*y
```

Out[27]:
```
90
```

In [28]:
```
z = x*y
```

In [29]:
```
print(z)
```

```
90
```

In [30]:
```
z = x/y
z
```

Out[30]:
```
10.0
```

In [31]:
```
z = x-y
z
```

Out[31]:
```
27
```

In [33]:
```
z = x**y
z
```

Out[33]:
```
27000
```

In [35]:
```
a = 35
b= 2
z = a//b # gives the whole number portion of a division
z
```

Out[35]:
```
17
```

In [36]:
```
a = 35
b = 2
z = a%b # gives the ramainder of a division
z
```

Out[36]:
```
1
```

In [4]:
```
studentsAttendanceListBatchNo = 223
print (studentsAttendanceListBatchNo)
print(len('studentsAttendanceListBatchNo'))
```

```
223
29
```

In [7]:
```
sALBNo = 223
print(sALBNo)
print(len('sALBNO'))
```

```
223
6
```

In [8]:
```
x = 14
y=35
j =3
print(j)
print(x)
```

```
3
14
```

In [9]:
```
x = 14
y= 35
j = 3

print(j)
print(x)
print(y)
```

```
3
14
35
```

Strings

In [12]:
```
myName = 'Diana-Abasi'
```

In [13]:
```
print(myName)
```

```
Diana-Abasi
```

In [14]:
```
type(myName)
```

Out[14]: str

In [15]:
```
#Slice and itirate over the charters in a string
# Each character is given an index position in the obejc. That way we can always reach it
```

In [16]:
```
print(len(myName))
```

```
11
```

In [17]:
```
# to obtain the firstcharter in myName:
#String slicing

myName[0]
```

Out[17]: 'D'

In [18]:
```
myName[1]
```

Out[18]: 'i'

In [19]:
```
fName = myName[0:5]
print(fName)
```

```
Diana
```

In [21]:
```
tt = 'today'
```

In [22]:
```
print(tt[0:3])
```

```
tod
```

In [23]:
```
x ='yy'
```

In [24]:
```
lName = myName[2:]
print(lName)
```

```
ana-Abasi
```

In [25]:
```
# Country information

country = '080344556_Nigeria_Abuja_2021'
```

In [26]:
```
len(country)
```

Out[26]: 28

In [27]:
```
phoneNo = country[0:9]
phoneNo
```

Out[27]: '080344556'

In [28]:
```
cName = country[10:17]
cName
```

Out[28]: 'Nigeria'

In [29]:
```
phoneNo,cName,city,yr = country.split('_')
```

In [30]:
```
print(phoneNo,cName,city,yr)
```

```
080344556 Nigeria Abuja 2021
```

Splitting

In [32]:
```
title = 'the Grand Khadi of Megaland'
```

In [33]:
```
title.split()
```

Out[33]: ['the', 'Grand', 'Khadi', 'of', 'Megaland']

In [38]:
```
code = 'just.do.it_555_amazingGrace.56.23_1234.45%.you.are.great'
result = code.split('_')
```

In [39]:
```
result
```

Out[39]: ['just.do.it', '555', 'amazingGrace.56.23', '1234.45%.you.are.great']

In [42]:
```
result[0].split('.')
```

Out[42]: ['just', 'do', 'it']

In [43]:
```
str1 = 'todaayisalovelydayweshouldallenjoythesun'

str1.split('s')
```

Out[43]: ['todaayi', 'alovelydaywe', 'houldallenjoythe', 'un']

In [ ]:
```

```