In [1]:
```
print("this my first coding")
```

```
this my first coding
```

COMMENTS IN PYTHON

In [4]:
```
# this is a representation of single line comments in python
print("hi")
```

```
hi
```

In [5]:
```
'''thi is a representation of multiline comments in python'''
print("hello world")
```

```
hello world
```

PYTHON VARIABLES

In [6]:
```
x=2#declaring a number  for x value as 2
y=3#declaring a number  for x value as 3
print(x)
```

```
2
```

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

```
3
```

In [11]:
```
print("sum of x and y is:",x+y)#we can different types of operations in this variables
```

```
sum of x and y is: 5
```

In [13]:
```
x=2
y="umesh"
print(x)
```

```
2
```

In [14]:
```
print(y)
```

```
umesh
```

In [21]:
```
print(type(x))# this type() is used to return the type of the data
```

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

In [22]:
```
print(type(y))
```

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

CASTING IN PYTHON

In [23]:
```
x=str(3)#x will be "3" it is a string
y=int(3.0)#y will be 3 it is an integer
z=float(3)#z will be 3.0 it is an float value
```

In [24]:
```
print(x)
print(y)
print(z)
```

```
3
3
3.0
```

PYTHON VARIABLE NAMES

A variable can have a short name (like x and y) or a more descriptive name (age, carname, total*volume). Rules for Python variables: A variable name must start with a letter or the underscore characterA variable name cannot start with a number *A variable name can only contain alpha-numeric characters and underscores (A-z, 0-9, and*) *Variable names are case-sensitive (age, Age and AGE are three different variables)

In [29]:
```
#example for legal variable names is
my_name="umesh"
_my_surname="valavala"
myage=20
myHEIGHT=5.6
my_Phno=9182789354
my_phno2=8886918278
```

In [30]:
```
my_name
```

Out[30]:
```
'umesh'
```

In [31]:
```
# examples for illegal variable names
2myvar = "John"
my-var = "John"
my var = "John"
```

```
  Input In [31]
    2myvar = "John"
     ^
SyntaxError: invalid syntax
```

In [32]:
```
#CAMEL CASE
myNAMEIS="umesh"#each word,except the first,starts with the capital letter
```

In [33]:
```
#PASCAL CASE
MyNameIs="umesh"#Each word starts with a capital letter:
```

In [34]:
```
#SNAKE CASE
#Each word is separated by an underscore character:
my_name_is="umesh"
```

Python Variables - Assign Multiple Values

In [35]:
```
x,y,z="umesh","ramesh","suresh"
print(x)
print(y)
print(z)
```

```
umesh
ramesh
suresh
```

In [36]:
```
#and you can assign the same value to multiple variables in one line:
x=y=z="umesh"
print(x)
print(y)
print(z)
```

```
umesh
umesh
umesh
```

In [37]:
```
#Unpack a Collection
'''If you have a collection of values in a list, tuple etc.
Python allows you to extract the values into variables.
This is called unpacking.'''
names =["umesh","ramesh","pallavi"]
x,y,z=names
print(x)
```

```
umesh
```

In [38]:
```
print(y)
```

```
ramesh
```

In [39]:
```
print(z)
```

```
pallavi
```

python Global Variables

variables that are created outside of a functinon are knomwn as global variables *global variables can be used by every one, both inside and outside.

In [58]:
```
#EXAMPLE:
x="valavala"
def myfunc():
        print(x+"umesh")
myfunc()
```

```
valavalaumesh
```

In [59]:
```
x = "awesome"

def myfunc():#my func() defines it returns the x value
  print("Python is " + x)

myfunc()
```

```
Python is awesome
```

In [60]:
```
x = "awesome"

def myfunc():
  x = "fantastic"
  print("Python is " + x)

myfunc()

print("Python is " + x)
```

```
Python is fantastic
Python is awesome
```

THE GLOBAL KEYWORD

normally when you create a variable inside a function,that variables is local,and can only be used inside that function to create a global variable inside a function, you can use global keyword

In [64]:
```
x="umesh"

def myfunc():
    #global x
    x="valavala"
myfunc()
print("my name is :"+x)
```

```
my name is :umesh
```

In [65]:
```
x="umesh"

def myfunc():
    global x
    x="valavala"
myfunc()
print("my name is :"+x)
```

```
my name is :valavala
```

In [ ]:
```

```