Function:

Set of Statements that performs a task/ action. (Calculation processing)

* Built-in function.
* User defined function.

User - defined – function:

Syntax:

Def fun(parameters):

Task

Return(data)

Input ()

Input ()

Print (fun (input data))

Return Statement: useful to return result out of a function.

Return x

Return 0

Etc.

Types of arguments:

1.Positional arguments:

The arguments that are passed in a specific order.

2.Keyword arguments: they are passed using parameter names.

3. default arguments: declared in the parameter of the function.

4.Variable length argument: they can store 0 or more values.

\*x this type of symbol is used for variable length argument.

variable length argument should be last in all arguments in the function.

def total(num, \*x):

    tot=num+sum(x)

    print("total=",tot)

total(100,10)

total(100,30,40,60,70)

function are first class object.

Object is a memory block. It contain specific type of data.ex:int, float, etc.

X=10 (10 is the object of int class)

Function can be used exactly like object

X=10

X=func()

Func(10)

Func(func)

b

B is a inner function.

* Recursive function or recursion: is a function that calls itself.
* Function decorator: function decorator that modifies the result of another function.

1. A decorator function takes another function as its parameter.
2. Write another function inside the decorator function and call the fun passed to decorator.
3. Return inner function name.