Basic Customization

Methods	Description
__new__(self)	return a new object (an instance of that class). It is called before __init__ method.
__init__(self)	is called when the object is initialized. It is the constructor of a class.
__del__(self)	for del() function. Called when the object is to be destroyed. Can be used to commit unsaved data or close connections.
__repr__(self)	for repr() function. It returns a string to print the object. Intended for developers to debug. Must be implemented in any class.
__str__(self)	for str() function. Return a string to print the object. Intended for users to see a pretty and useful output. If not implemented, __repr__ will be used as a fallback.
__bytes__(self)	for bytes() function. Return a byte object which is the byte string representation of the object.
__format__(self)	for format() function. Evaluate formatted string literals like % for percentage format and 'b' for binary.
__lt__(self, anotherObj)	for < operator.
__le__(self, anotherObj)	for <= operator.
__eq__(self, anotherObj)	for == operator.
__ne__(self, anotherObj)	for != operator.
__gt__(self, anotherObj)	anotherObj)for > operator.
__ge__(self, anotherObj)	anotherObj)for >= operator.

Arithematic Operators

Methods	Description
__add__(self, anotherObj)	for + operator.
__sub__(self, anotherObj)	for – operation on object.
__mul__(self, anotherObj)	for * operation on object.
__matmul__(self, anotherObj)	for @ operator (numpy matrix multiplication).
__truediv__(self, anotherObj)	for simple / division operation on object.
__floordiv__(self, anotherObj)	for // floor division operation on object.

Type Conversion

Methods	Description
__abs__(self)	make support for abs() function. Return absolute value.
__int__(self)	support for int() function. Returns the integer value of the object.
__float__(self)	for float() function support. Returns float equivalent of the object.
__complex__(self)	for complex() function support. Return complex value representation of the object.
__round__(self, nDigits)	for round() function. Round off float type to 2 digits and return it.
__trunc__(self)	for trunc() function of math module. Returns the real value of the object.
__ceil__(self)	for ceil() function of math module. The ceil function Return ceiling value of the object.
__floor__(self)	for floor() function of math module. Return floor value of the object.

Emulating Container Types

Methods	Description
__len__(self)	for len() function. Returns the total number in any container.
__getitem__(self, key)	to support indexing. LIke container[index] calls container.__getitem(key)explicitly.
__setitem__(self, key, value)	makes item mutable (items can be changed by index), like container[index] = otherElement.
__delitem__(self, key)	for del() function. Delete the value at the index key.
__iter__(self)	returns an iterator when required that iterates all values in the container.