Introduction to Programming

Python Special Methods

Python provides the following functions for use when overloading the mathematical operators in user-defined classes. There are many other methods. You can check them out here

http://www.python.org/doc/QuickRef.html#SpecialMethodsand

and


__add__(self,other)  self + other
__sub__(self,other)  self - other
__mul__(self,other)  self * other
__div__(self,other)  self / other (Python 2 only)
__truediv__(self,other)  self / other (Python 3)
__floordiv__(self,other)  self // other
__mod__(self,other)  self % other
__divmod__(self,other)  divmod(self,other)
__pow__(self,other [,modulo])  self ** other, pow(self, other, modulo)
__lshift__(self,other)  self << other
__rshift__(self,other)  self >> other
__and__(self,other)  self & other
__or__(self,other)  self | other
__xor__(self,other)  self ^ other
__radd__(self,other)  other + self
__rsub__(self,other)  other - self
__rmul__(self,other)  other * self
__rdiv__(self,other)  other / self (Python 2 only)
__rtruediv__(self,other)  other / self (Python 3)
__rfloordiv__(self,other)  other // self
__rmod__(self,other)  other % self
__rdivmod__(self,other)  divmod(other,self)
__rpow__(self,other)  other ** self
__rlshift__(self,other) other << self
__rrshift__(self,other) other >> self
__rand__(self,other) other & self
__ror__(self,other) other | self
__rxor__(self,other) other ^ self
__iadd__(self,other) self += other
__isub__(self,other) self -= other
__imul__(self,other) self *= other
__idiv__(self,other) self /= other (Python 2 only)
__itruediv__(self,other) self /= other (Python 3)
__ifloordiv__(self,other) self //= other
__imod__(self,other) self %= other
__ipow__(self,other) self **= other
__iand__(self,other) self &= other
__ior__(self,other) self |= other
__ixor__(self,other) self ^= other
__ilshift__(self,other) self <<= other
__irshift__(self,other) self >>= other
__neg__(self) –self
__pos__(self) +self
__abs__(self) abs(self)
__invert__(self) ~self
__int__(self) int(self)
__long__(self) long(self) (Python 2 only)
__float__(self) float(self)
__complex__(self) complex(self)