| Common Syntax | Special Method Form | |
|---|---|---|
| a + b | a.__add__(b); | alternatively b.__radd__(a) |
| a − b | a.__sub__(b); | alternatively b.__rsub__(a) |
| a * b | a.__mul__(b); | alternatively b.__rmul__(a) |
| a / b | a.__truediv__(b); | alternatively b.__rtruediv__(a) |
| a // b | a.__floordiv__(b); | alternatively b.__rfloordiv__(a) |
| a % b | a.__mod__(b); | alternatively b.__rmod__(a) |
| a ** b | a.__pow__(b); | alternatively b.__rpow__(a) |
| a << b | a.__lshift__(b); | alternatively b.__rlshift__(a) |
| a >> b | a.__rshift__(b); | alternatively b.__rrshift__(a) |
| a & b | a.__and__(b); | alternatively b.__rand__(a) |
| a ^ b | a.__xor__(b); | alternatively b.__rxor__(a) |
| a \| b | a.__or__(b); | alternatively b.__ror__(a) |
| a += b<br>a −= b<br>a *= b<br>... | a.__iadd__(b)<br>a.__isub__(b)<br>a.__imul__(b)<br>... | |
| +a | a.__pos__() | |
| −a | a.__neg__() | |
| ~a | a.__invert__() | |
| abs(a) | a.__abs__() | |
| a < b | a.__lt__(b) | |
| a <= b | a.__le__(b) | |
| a > b | a.__gt__(b) | |
| a >= b | a.__ge__(b) | |
| a == b | a.__eq__(b) | |
| a != b | a.__ne__(b) | |
| v in a | a.__contains__(v) | |
| a[k] | a.__getitem__(k) | |
| a[k] = v | a.__setitem__(k,v) | |
| del a[k] | a.__delitem__(k) | |
| a(arg1, arg2, ...) | a.__call__(arg1, arg2, ...) | |
| len(a) | a.__len__() | |
| hash(a) | a.__hash__() | |
| iter(a) | a.__iter__() | |
| next(a) | a.__next__() | |
| bool(a) | a.__bool__() | |
| float(a) | a.__float__() | |
| int(a) | a.__int__() | |
| repr(a) | a.__repr__() | |
| reversed(a) | a.__reversed__() | |
| str(a) | a.__str__() | |

**Table 2.1:** Overloaded operations, implemented with Python's special methods.