

Creating Data Type - Fraction

Created a new data type called fraction using following techniques :-

- Functions
- Dunder Functions
- OOPS
 - Class
 - Object

```
class Fraction:
    def __init__(self, n, d):
        self.num = n
        self.den = d

    def __str__(self):
        return '{}/{ {}'.format(self.num, self.den)

    def __add__(self, other):
        temp_num = self.num * other.den + other.num * self.den
        temp_den = self.den * other.den
        return '{}/{ {}'.format(temp_num, temp_den)

    def __sub__(self, other):
        temp_num = self.num * other.den - other.num * self.den
        temp_den = self.den * other.den
        return '{}/{ {}'.format(temp_num, temp_den)

    def __mul__(self, other):
        temp_num = self.num * other.den
        temp_den = self.den * other.den
        return '{}/{ {}'.format(temp_num, temp_den)

    def __truediv__(self, other):
        temp_num = self.num * other.den
        temp_den = self.den * other.num
        return '{}/{ {}'.format(temp_num, temp_den)

x = Fraction(4,5) # object creation
print(x)

4/5

y = Fraction(5,6)
print(y)

5/6

print(x + y)
print(x - y)
```

```
print(x * y)
print(x / y)
```

49/30

-1/30

24/30

24/25

```
L = [1,2,3,x]
```

```
L
```

```
[1, 2, 3, <__main__.Fraction at 0x1c48284dac0>]
```