

Math Fraction (module)

- Fractions is in the form p/q where p [numerator] is greater than q [denominator]
- Hence the module math.fraction support operations on numbers in the form p / q
- The constructors for creating fractions are

```
Fraction( num=0, den=1 )  
Fraction( float )  
Fraction( string )
```

```
limit_denominator(den=10)  
  
numerator  
denominator
```

- Lets see this with an example

```
>>> import fractions
>>> f1 = fractions.Fraction(1,2)
>>> f1
Fraction(1, 2)
>>> print('{0}'.format(f1))
1/2
>>> f2 = fractions.Fraction(0.2)
>>> f2
Fraction(3602879701896397, 18014398509481984)
>>> f3 = fractions.Fraction('0.3')
>>> f3
Fraction(3, 10)
>>> f2 = f2.limit_denominator(10)
>>> f2
Fraction(1, 5)
>>> print('{0}'.format(f1 + f2))
7/10
>>> print('{0}'.format(f2 - f1))
-3/10
>>> |
```

```
>>> print('{0}'.format(f2*f1))
1/10
>>> print('{0}'.format(f2/f1))
2/5
>>> |
```

- We can also perform addition , subtraction , multiplication and division on fraction
- If you have list of tuples you can convert it into fractions also