

## \* Mathematical Operations on Series \*

As we perform mathematical operations in Maths, same addition, subtraction, multiplication and division can be performed on two Series object.

Return Type: Float (Decimal No.)

Imp. Operations are implemented on values matching index and rest are filled with NaN (by default).

Example:-> Let us have two series object "series1" and "series2".

```
series1 = pd.Series([1, 2, 5, 6, 8],  
                    index = ['a', 'b', 'd', 'e', 'g'])
```

```
series2 = pd.Series([6, 8, 7, 9, 12],  
                    index = ['a', 'c', 'f', 'g', 'd'])
```

• Addition: `print(series1 + series2)`

a      7.0

b      NaN

c      NaN

d      17.0

e      NaN

f      NaN

g      17.0

dtype: float64



- Subtraction: `print (series1 - series2)`

a	-5.0
b	NaN
c	NaN
d	-7.0
e	NaN
f	NaN
g	-1.0

`dtype: float64`

- Multiplication

`print (series1 * series2)`

a	6.0
b	NaN
c	NaN
d	60.0
e	NaN
f	NaN
g	72.0

`dtype: float64`

- Division

`print (series1 / series2)`

a	0.16
b	NaN
c	NaN
d	0.41
e	NaN
f	NaN
g	0.88

`dtype: float64`