

Addition of NumPy array:

* If you want to add all the elements present in the both the array then use sum method.

In [1]:

```
import numpy as np
```

In [2]:

```
n1 = np.array([10,20])  
n2 = np.array([30,40])
```

In [3]:

```
np.sum([n1,n2])
```

Out[3]:

100

* If you want to add the corresponding elements of both the array then use sum method with axis value 0.

In [4]:

```
np.sum([n1,n2],axis = 0)
```

Out[4]:

```
array([40, 60])
```

* If you want to add the elements present in both the array seperately then use sum method with axis value 1.

In [5]:

```
np.sum([n1,n2],axis = 1)
```

Out[5]:

```
array([30, 70])
```

Basic NumPy Array Mathematics:

1.) Basic Addition:

In [26]:

```
n3 = np.array([10,20,30])
```

In [27]:

```
n3 = n3 + 1  
n3
```

Out[27]:

```
array([11, 21, 31])
```

2.) Basic Subtraction:

In [20]:

```
n4 = np.array([10,20,30])
```

In [21]:

```
n4 = n4 - 5  
n4
```

Out[21]:

```
array([ 5, 15, 25])
```

3.) Basic Multiplication:

In [22]:

```
n5 = np.array([10,20,30])
```

In [23]:

```
n5 = n5 * 5  
n5
```

Out[23]:

```
array([ 50, 100, 150])
```

4.) Basic Division:

In [24]:

```
n6 = np.array([10,20,30])
```

In [25]:

```
n6 = n6 / 10  
n6
```

Out[25]:

```
array([1., 2., 3.])
```

Basic Math Functions:

1.) Mean:

In [29]:

```
n7 = np.array([10,20,30,40,50,60])  
np.mean(n7)
```

Out[29]:

```
35.0
```

2.) Median:

In [31]:

```
n8 = np.array([11,44,5,96,67,85])  
np.median(n8)
```

Out[31]:

55.5

3.) Standard Deviation:

In [33]:

```
n9 = np.array([1,5,3,100,4,48])  
np.std(n9)
```

Out[33]:

36.59424666377065

In []: