## Day 75-90 days of Analytics: Numpy Operations

In today's video, we looked at some Numpy Operations (mathematical, statistical, ...)

The following were mentioned

-We can add, subtract, divide, multiply a scalar with and array. It operation is performed on the individual array elements with the scalar. Examples

```
import numpy as np
a = np.array([1,2,3,4])
print(a+2)
print(a-2)
print(a*2)
print(a/2)
print(a**2)
```

-Statistical operations can also be performed on arrays via functions. Example

```
import numpy as np
d2 = np.array([[1,2,3],[5,6,7]])
print(np.max(d2)) # prints 7 which is the maximum in the whole array
print(np.max(d2, axis = 1)) # prints an array [3,7] where each element is the maximum per row
of the array
print(np.sum(d2)) #prints 24 which is the sum of all elements in the array
print(np.sum(d2,axis=1)) #prints an array [6 18] where each elemnt is the sum per row of the
array
d2_zeros = np.zeros((2,3)) # creates a 2x3 array initialised with zeros
print(d2_zeros)
d2_ones = np.ones((2,3)) # creates a 2x3 array initialised with ones
print(d2_ones)
d2_full = np.full((2,2),500) # creates a 2x2 array initialised with 500
print(d2_full)
d2_identity = np.identity(3) # creates a 3x3 identity matrix
print(d2_identity)
```

Link to the YouTube Recording: https://www.youtube.com/watch?v=tB32URZLy7I

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