

→ Data Manipulation Techniques

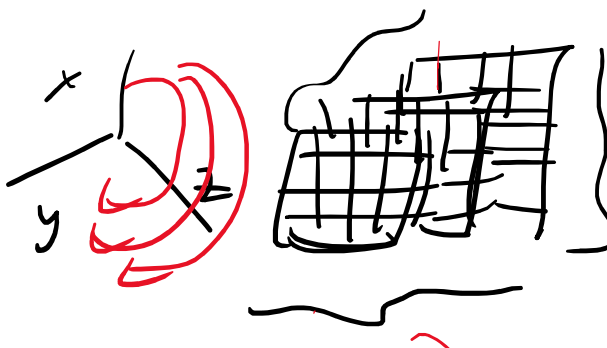
→ NumPy ~ Numerical Python
↓
Math/Phy

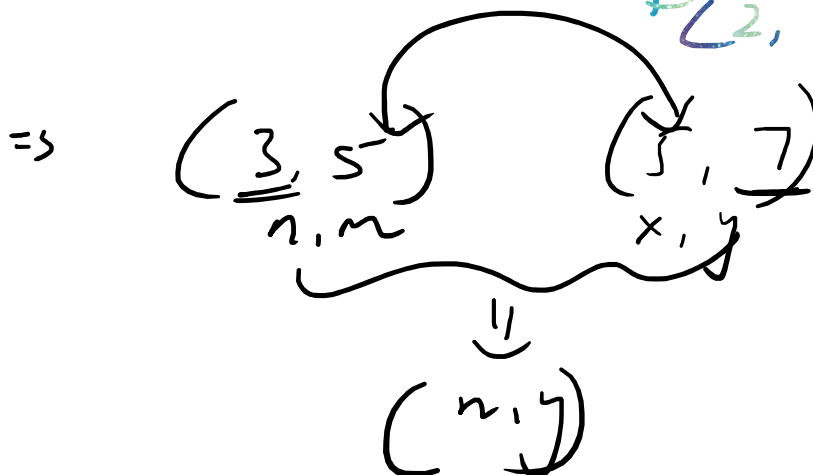
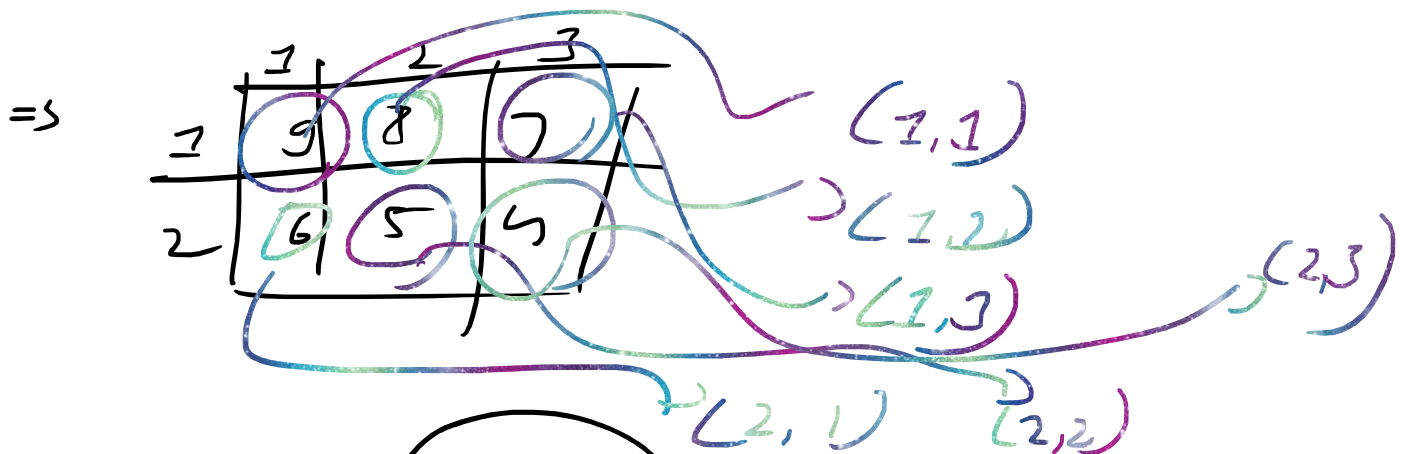
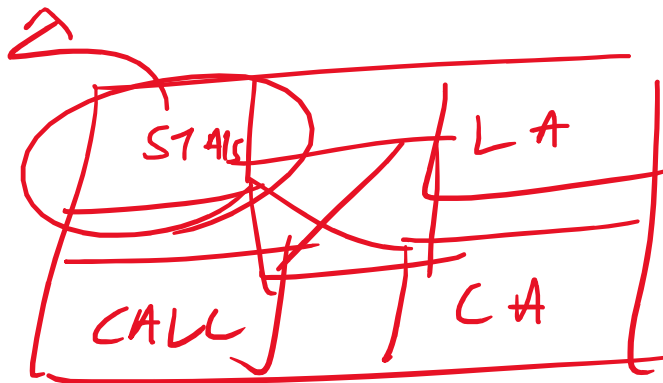
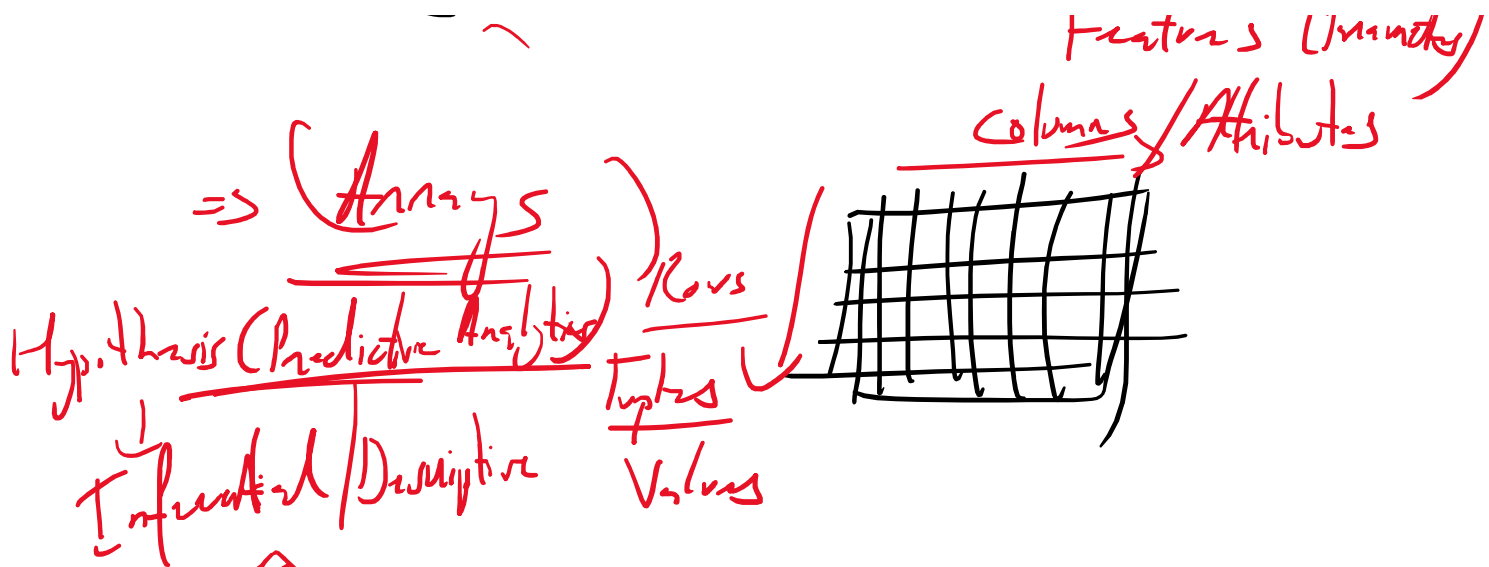


→ [.] ~ Scalar

→ [| | | | | |] ~ Vector
(1-D)

+ { [| | | | |]
[| | | | |]
[| | | | |] } ~ Matrix
(2-D)

{  } ~ Tensor (3-D ... n-D)
Features (Parameters)
... 1 ... 1/1/1/1



n, m, x, y, \dots

Dot Product / Matrix Multiplication

⑤

np.dot

$$\underbrace{(n, x) \times (x, m)}_{(n, m)}$$

*

np.matmul

$$(n) \times (x, y)$$