Agenda

- Working with 2 Matrices
  - Indexing
  - Slicing
  - Fancy Indexing (masking)
  - Transpose
- Aggregate Functions : sum, min, max, count mean, std
- Logical Ops in numpy
  - Any
  - All
  - where
- Use-Case: Fitness data Analysis

Working with 2 Matrices

- Using np.array to convert 2d List into numpy array
- Using reshape on 1d array

0, 1, 2, 3
4, 5, 6, 7
.. ..

indexing

- a = [[ ] [ ] [ ]]

a[0] a[1] a[2]

[[a[0][0], a[0][1] - - - - - -]
[a[1][0], a[1][1] - - - - - -]
[a[2][0], a[2][1] - - - - - -]

Aggregate Functions

* For each row → axis = 1
* For each col → axis = 0

Logical Ops

- any: Check if any of the condition evals to True
  - return True

- all: all condition must satisfy
  - return True

optional

* where (condition, [x, y])

x: if condition is True
replace with x

y: else y