Images Part 5

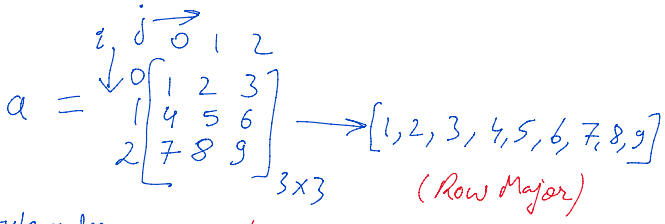
Wednesday, June 7, 2023 6:04 PM

Flatten() v/s Ravel()

→ flatten() is a function of numpy nd array object, so it works with numpy array.

→ ravel() is a library level function which can be invoked on any object that can be correctly parsed.

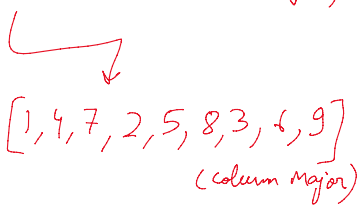
Eg given a list of nd arrays, ravel() ✓
flatten() ✗



→ order parameter in ravel() & flatten()

(Default) "C" → indexed in row major format, C-Style order
↳ final axis index changes the fastest
↳ first axis index changes the slowest

"F" → indexed in column major format, Fortran Style order
↳ final axis index changes the slowest
↳ first axis index changes the fastest



* 'C' & 'F' ignore the array's memory layout and solely pertain to the order of axis

"A" → items should be read in Fortran like Indexing
if 'A' is fortran contiguous memory
otherwise "C" like order.

"K" → read the items in the order they appear in the memory

① Ravel() → returns reference / view of the original

② Ravel() is faster than flatten()