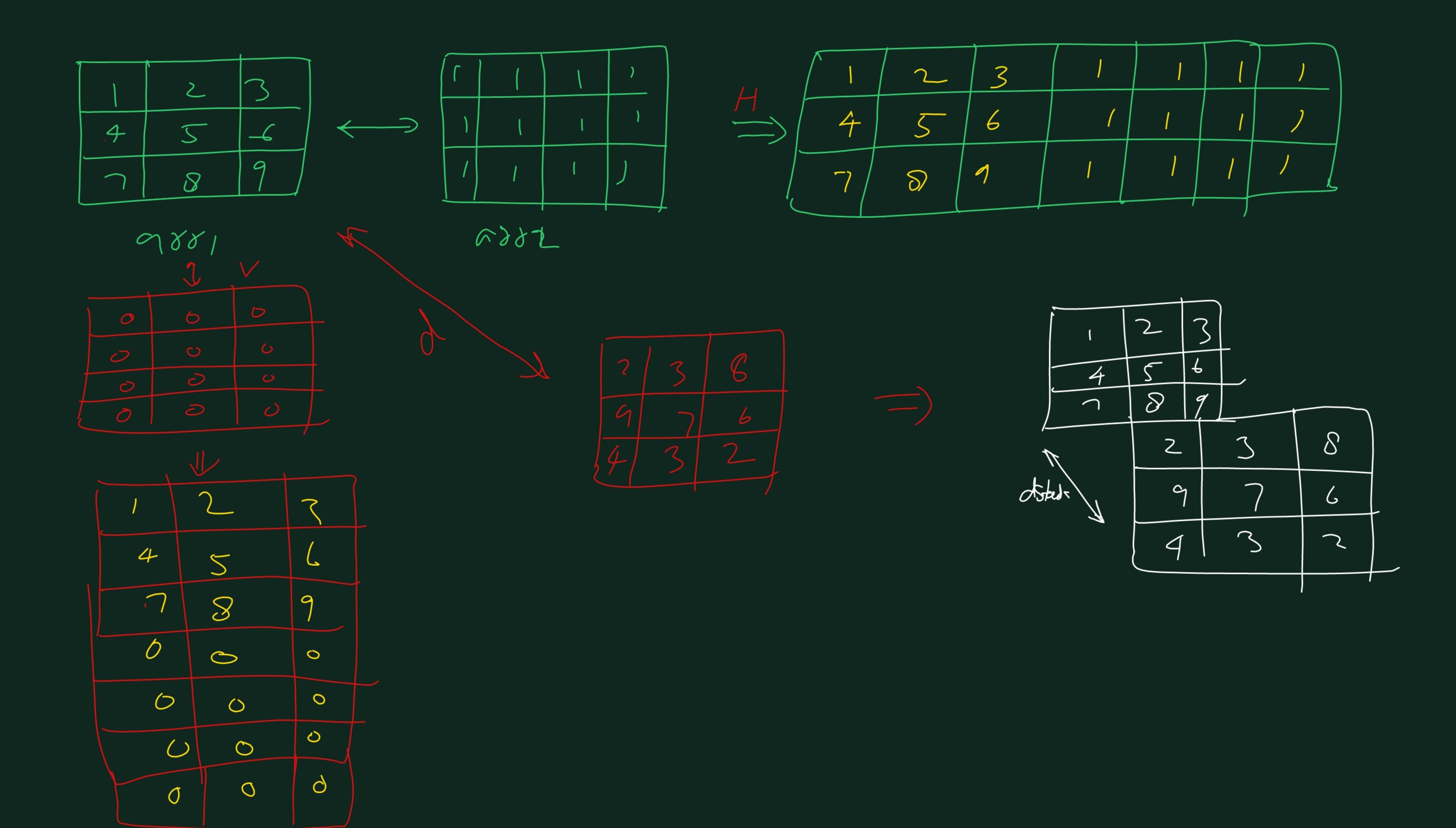
Numpy

- 3) Operation/Working with arrays.
 - (a) Combine
 - (1) Honzontal Stacking -> np. hstark (axx1, axx2)
 - (11) Vertical Stacking -> np. vstack (9881,0082)
 - (iii) Depth Stacking np Astack (a881, 9862)

Rows to Rows

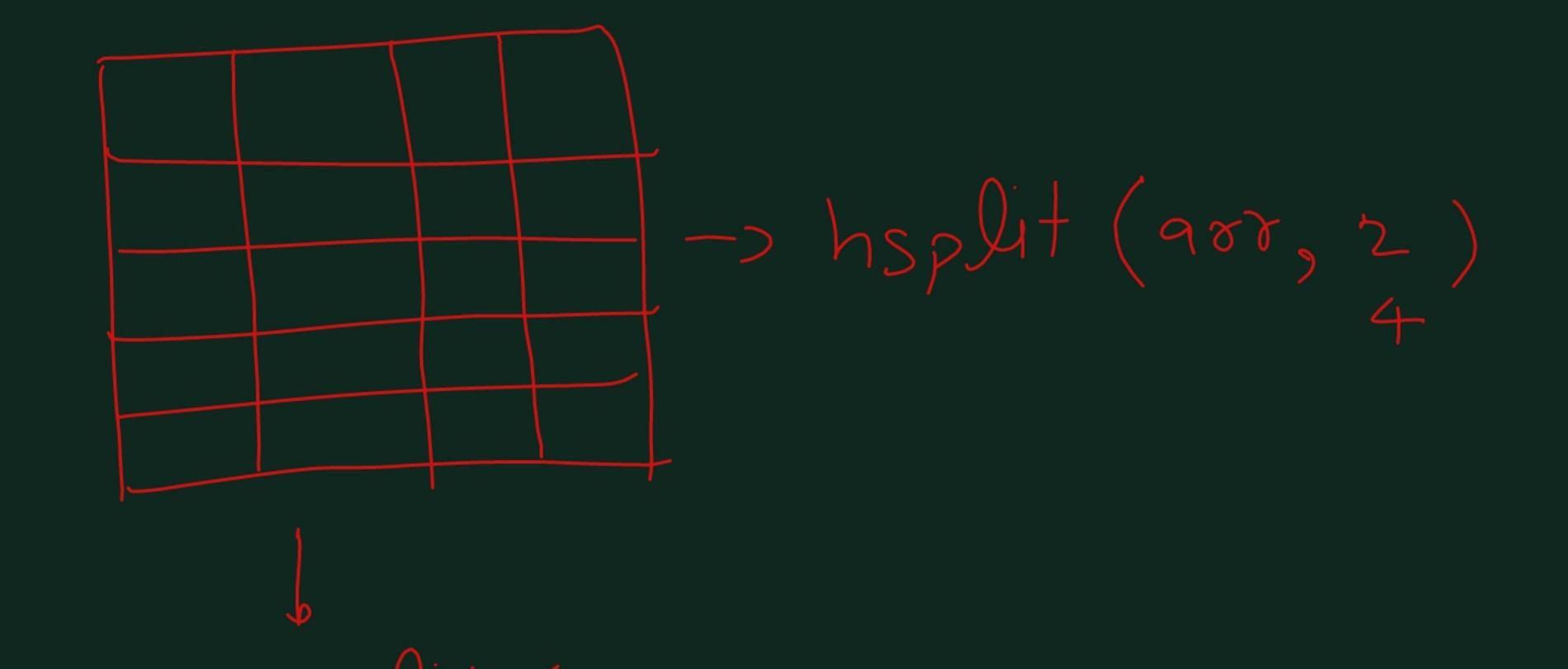
Columns to Columns



Splitting of array :

np.hsplit(array, no. et split)

np. vsplit (array, no. of split)



np. Where ()

np. where (condition, olp, solp)
nested

np. where (c1, 0/P, np. where (c2, 0/P, 0/P))

Mp. Where (988 23, 0, 1)

Junitions.

transpose(), T -> Convert nows to columns & vice versa

Jlatten(), ravel() -> Convert any shape to 1D

Operations:

- 1) Arithmetic ; +, -, +, /
- 2) Modhemodic: add(), multiply, divide(), dot(), subtract()
- 3 Statistic : max(), min(), som(), std(), mean(), var() _ -

$$\begin{bmatrix}
5 & 1 & 2 \\
3 & 4 & 5
\end{bmatrix} + 2 \Rightarrow \begin{bmatrix}
2 & 3 & 4 \\
5 & 6 & 7
\end{bmatrix}$$

$$\begin{bmatrix}
2 & 3 & 4 \\
5 & 6 & 7 \\
8 & 9 & 10
\end{bmatrix}
+
\begin{bmatrix}
6 & 1 & 2 \\
3 & 4 & 5 \\
6 & 7 & 8
\end{bmatrix}$$
(or) m. add (a) 84, 99822) = $\begin{bmatrix}
2+0 & 3+1 & 4+2 \\
5+3 & 6+4 & 7+5 \\
- & - & -
\end{bmatrix}$

·dot (arm, arm2)
$$\Longrightarrow$$
 (2*0+3*3+4*6 2*1+3*4+4*7 2*2+3*5+4*8)
San be performed on square shapes.

Broadcastins Arrows

$$988 = \left(\begin{array}{c} 1 & 2 & 3 & 4 \\ 5 & 6 & 7 & 8 \\ 9 & 10 & 11 & 12 \end{array} \right)$$

mp. max (axx)

mp. min (axx)

mp. min (axx)

mp. sum (axx)

mp. max (axx [:, 2])

access ele of this array

np. nditer () -> n-dimensional iteration

 =) ToDo

try using nested for hosp

for loop ____

Joe 160 b