



Python for data analysis and visualization and HW6

Extra Generic Python Assistance

- <https://www.w3schools.com/python/> free excellent guided tutorials
- do as much or little as you find helpful
- find help with questions/learn new skills

Live coding

- https://github.com/SUPScientist/Advanced-Quantitative-Oceanography/blob/main/notebooks/Intro_05_LibraryDataStructures.ipynb as background
- https://github.com/SUPScientist/Advanced-Quantitative-Oceanography/blob/main/notebooks/Intro_06_Xarray-basics.ipynb as assignment

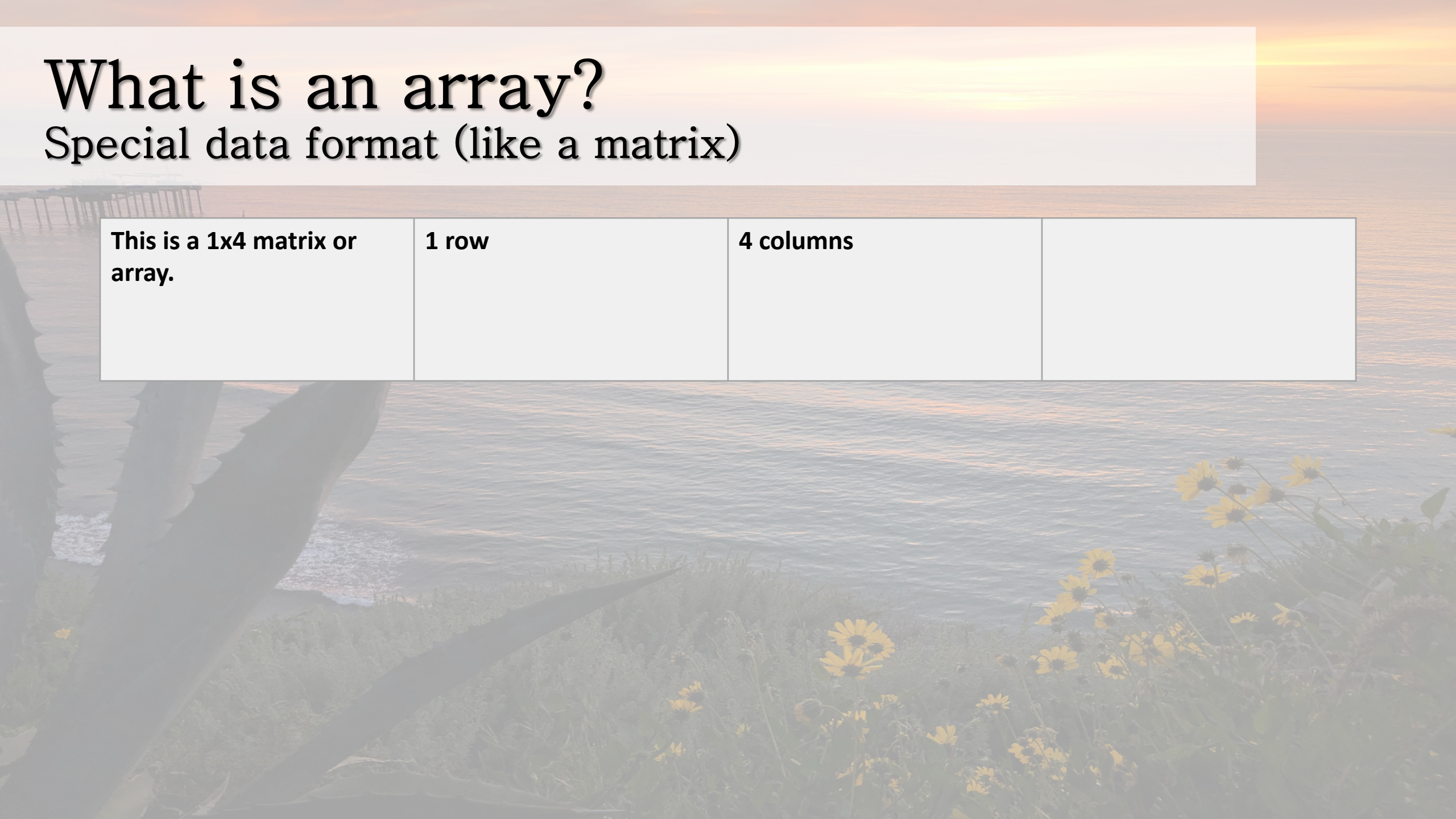
What is an array?

Special data format (like a matrix)

This is a 1x4 matrix or array.

1 row

4 columns



Arrays (generic example)

3x4 (rows x columns)			

Arrays (spatial)

LATITUDE

LONGITUDE

Arrays (spatial)

LATITUDE	20 °C	24 °C	21 °C	18 °C
LONGITUDE				

Arrays (spatial)

LATITUDE	20 °C	24 °C	21 °C	18 °C
	21 °C	23 °C	26 °C	22 °C
	19 °C	.	.	.
LONGITUDE				

Arrays (spatial)

TIME	LATITUDE				
		18 °C	25 °C	23 °C	19 °C
		23 °C	24 °C	28 °C	23 °C
		18 °C	.	.	.

HW 6

Please submit...

The background of the slide is a dark, textured surface composed of numerous thin, vertical lines in shades of green, yellow, and pink. These lines vary in height and density, creating a dynamic, almost digital or organic pattern.

Nothing.

Review W3Schools and past couple exercises.