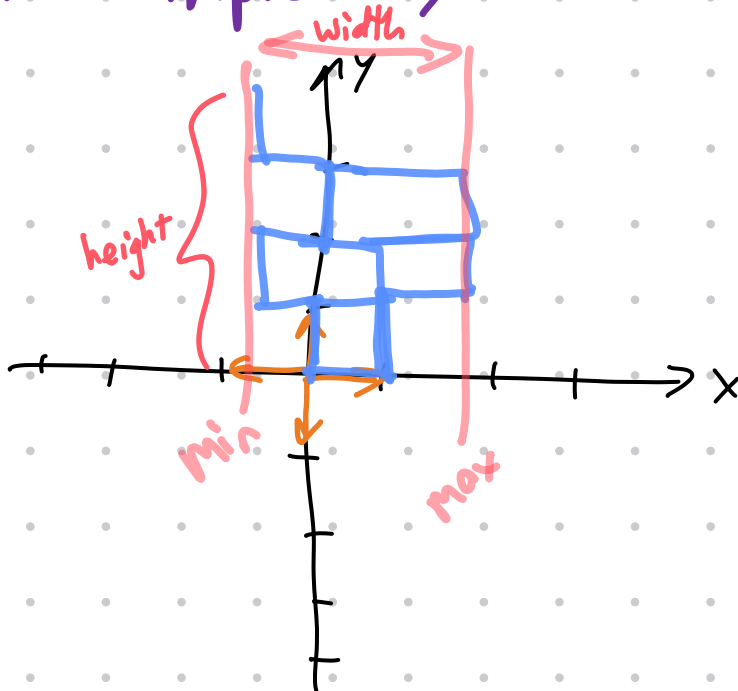


1 May 2024

1-D Random Walks

- Average distance from the origin after n steps is proportional to \sqrt{n}
- Expected number of returns to the origin is infinite (for an infinite number of steps)
- An infinite 2D simple symmetric random walk
visits every position ^(integer) on the number line
infinitely many times.
with probability 1

2-D Simple symmetric random walks



	locations	
	x	y
0	0	0
1	x_1	y_1
2	x_2	y_2
3	x_3	y_3
4
...	x_k	y_k
...

← location at step k

NumPy: Numerical Python

↳ package: good features for linear algebra