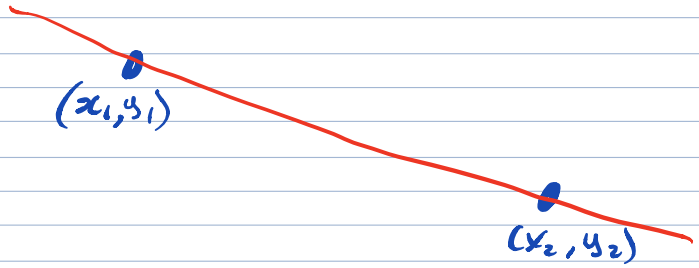


$$y = \frac{y_2 - y_1}{x_2 - x_1}(x - x_1) + y_1$$

$x = x_1 \rightsquigarrow y = y_1$

$x = x_2 \rightsquigarrow y = y_2$

mínimos cuadrados

rand() $\longrightarrow$ $[0, 1)$

rand() - 0.5 $\longrightarrow$ $[-0.5, 0.5)$

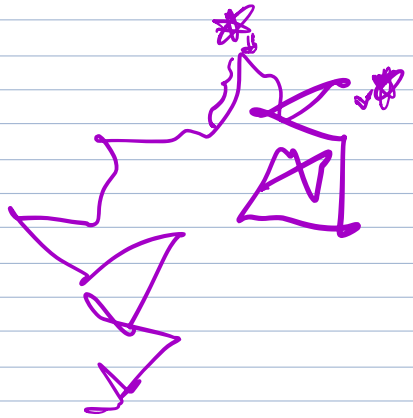
$[-1, 1)$

$y = 2*(\text{rand}() - 0.5) \longrightarrow [-1, 1)$

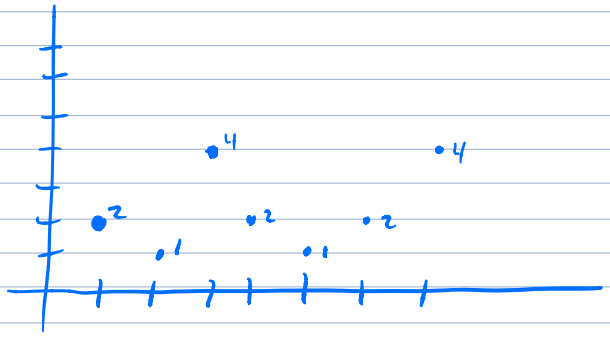
movimento Browniano { cultura general }

→ Einstein

→ Caminantes aleatorios



Repaso Matriz de Recurrencia



d_1	2	1	4	2	1	2	4
2	0	1	2	0	1	0	2
1	1	0	3	1	0	1	3
4	2	3	0	2	3	2	0
2	0	1	2	0	1	0	2
1	1	0	3	1	0	1	3
2	0	1	2	0	1	0	2
4	2	3	0	2	3	2	0

$$d_1(x,y) = |x-y|$$

$x_{max} = 4$

$x_{min} = 1$

$$d_2(x,y) = \min\{|x-y-(x_{max}-x_{min})|, |x-y|\}$$

d_2	2	1	4	2	1	2	4 ← y
2	0	1	2	0	1	0	2
1	1	0	3	1	0	1	3
4	1	0	0	1	0	1	0
2	0	1	2	0	1	0	2
1	1	0	3	1	0	1	3
2	0	1	2	0	1	0	2
4	1	0	0	1	0	1	0
↑ x							

$$d_2(x,y) = \min\{|x-y-3|, |x-y|\}$$

$1-4-3$

$d(x,y) = d(y,x)$ ¿?