

$$N = 1024$$

$$v = k = nV = [1024, 512, 256, 128, 64, 32, 16, 8, 4, 2]$$

$$x' = \log_2 nV = [10, 9, 8, 7, 6, 5, 4, 3, 2, 1]$$

$y'?$

$$v = 1024 \rightarrow 1 \text{ ventana}$$

$$S[0:1024]$$

$$x' = 10$$

$$y'(10) = \log_2 \frac{\text{Fluctuación}(S[0:1024])}{\text{Std}(S[0:1024])}$$

$$y' =$$

$$v = 512 \quad x' = 9$$

$$S[0:512]$$

$$S[1:513]$$

$$S[2:514]$$

\vdots

$$S[512:1024] \quad n = 513 \text{ ventanas}$$

$$Y^L = \log_2 \left(\frac{\frac{F(S[0:512])}{std(S[0:512])} + \frac{F(S[1:513])}{std(S[1:513])} + \dots + \frac{F(S[512:1024])}{std(S[512:1024])}}{n} \right)$$

$$V = 256 \quad X' = 8$$

$$S[0:256]$$

$$S[1:257]$$

$$S[2:258]$$

⋮

$$S[1024-256:1024]$$

$$n = 1024 - 256 + 1 \text{ ventanas}$$

$$Y^L = \log_2 \left(\frac{\frac{F(S[0:256])}{std(S[0:256])} + \frac{F(S[1:257])}{std(S[1:257])} + \dots + \frac{F(S[1024-256:1024])}{std(S[1024-256:1024])}}{n} \right)$$

$$m = \text{mean}(S[1:257]) \quad \checkmark$$

$$d = S[1:257] - m \quad \checkmark$$

d es un arreglo

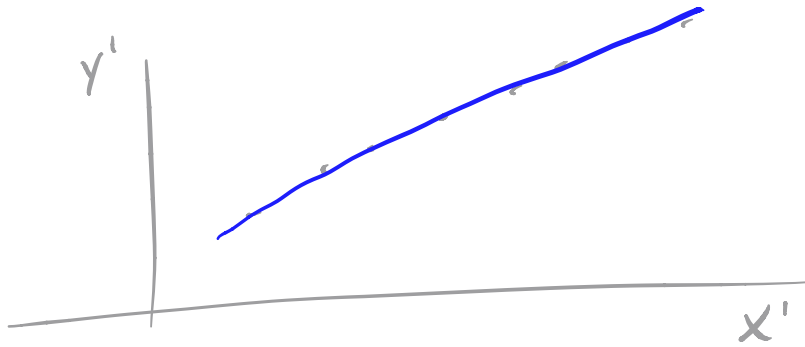
$$dac = \text{cumsum}(d) \quad \checkmark$$

dac es un arreglo

$$\text{val min} = \min(dac)$$

$$\text{val max} = \max(dac)$$

$$F(S[1:257]) = \text{valmax} - \text{valmin} \quad \checkmark$$



recta de
mínimos cuadrados
 $P = \text{pendiente}$

$$H = P$$

$np.\text{mean} \dots$

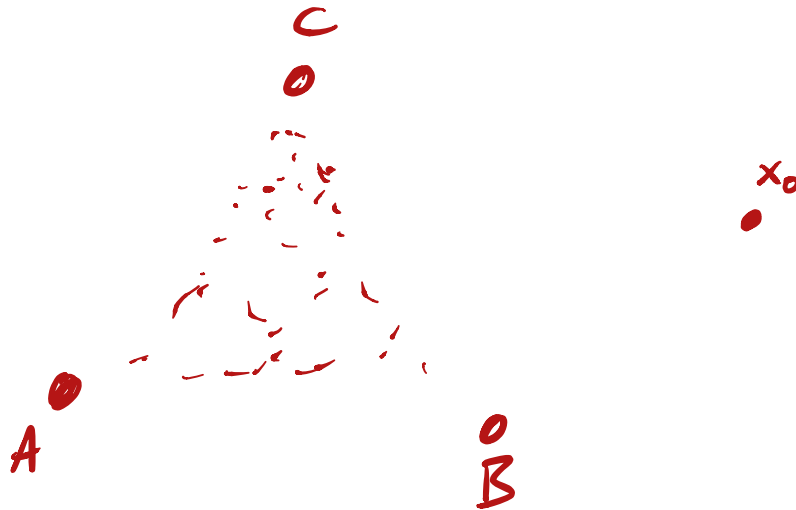
$np.\text{std} \dots$

$np.\log_2 \dots$

$np.\text{cumsum} \dots$

IFS

Sistemas de Funciones Iteradas



0. 3 pts. fijos $p = [A, B, c]$

1 pto. al azar $x_0, i=1$

1. $r = \text{rand}[0, 1, 2]$

$v = p[r]$

2. $x_i = \frac{v + x_{i-1}}{2}$

3. $i = i + 1$, regresar al paso 1.