

$$S = \text{símbolos a utilizar}$$
$$= \{ \square, \text{X} \}$$
$$= \{ 0, 1 \}$$

# reglas = cuantas tablas diferentes  
salen =  $5^r$

Reglas 0...255

$$\begin{array}{r} 57 \\ 2 \overline{) 115} \\ \underline{15} \\ 1 \end{array} \quad \begin{array}{r} 28 \\ 2 \overline{) 57} \\ \underline{17} \\ 1 \end{array} \quad \begin{array}{r} 14 \\ 2 \overline{) 28} \\ \underline{0} \\ 0 \end{array} \quad \begin{array}{r} 7 \\ 2 \overline{) 14} \\ \underline{0} \\ 0 \end{array}$$
  

$$\begin{array}{r} 3 \\ 2 \overline{) 7} \\ \underline{4} \\ 3 \end{array} \quad \begin{array}{r} 1 \\ 2 \overline{) 3} \\ \underline{2} \\ 1 \end{array} \quad \begin{array}{r} 0 \\ 2 \overline{) 1} \\ \underline{0} \\ 1 \end{array} \quad \begin{array}{r} 0 \\ 2 \overline{) 0} \\ \underline{0} \\ 0 \end{array} \quad \begin{array}{r} 0 \\ 2 \overline{) 0} \\ \underline{0} \\ 0 \end{array} \dots$$

	a	b	c	
0	0	0	0	↑ - significant
1	0	0	1	
2	0	1	0	
3	0	1	1	
4	1	0	0	↓ + significant
5	1	0	1	
6	1	1	0	
7	1	1	1	

regla [5]  $\rightarrow$

Para calcular  $E[i]$  y columna 3  
regla  $[E[i-1][j-1] \times 4 + E[i-1][j] \times 2 + E[i-1][j+1]]$

2018

$$10^0 \times 8 + 10^1 \times 1 + 10^2 \times 0 + 10^3 \times 2$$

$$1 \cdot 8 + 10 \cdot 1 + 0 + 1000 \cdot 2 = 2018$$

regla = 115 = 01110011

tengo lentes

	True	False
True	True	False
False	False	False

"1"	"or"
1	0
1	1
0	0

<<

$1 \ll 1 \rightarrow 10_2 = 2_{10}$   
 $1 \ll 2 \rightarrow 100_2 = 4_{10}$   
 $1 \ll 3 \rightarrow 1000_2 = 8_{10}$   
 $5 \ll 3 \rightarrow 101000_2 = 40_{10}$   
 $2^3 + 2^2 = 32 + 8$

115 = 01110011 & 00100000

$\rightarrow 00100000 \rightarrow 32 = \text{True}$   
 podría devolver con otra regla  
 $00000000 \rightarrow 0 = \text{False}$

$1 \ll 5 \rightarrow 100000$

$1 \ll 3 \rightarrow 1000$

$$\begin{array}{r} 10111001 \\ 10101110 \\ \hline 10111111 \end{array}$$

$x \ll 2 \mid y \ll 1 \mid z$

x = 1	x << 2	→ 100
y = 0	y << 1	→ 000
z = 1	z	→ 001
		<u>101</u>