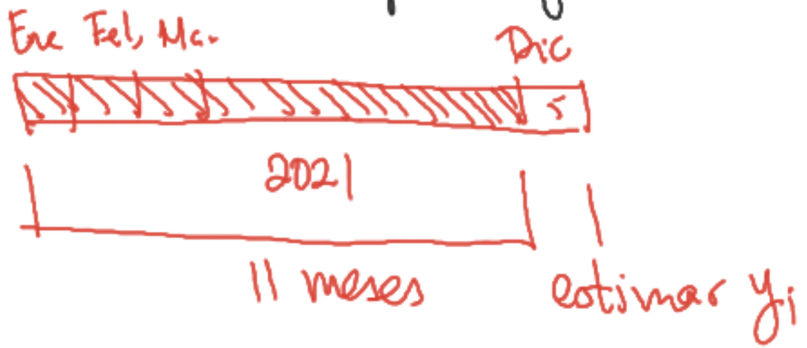
(X_i, y_i) no tenemos los y_i

↓

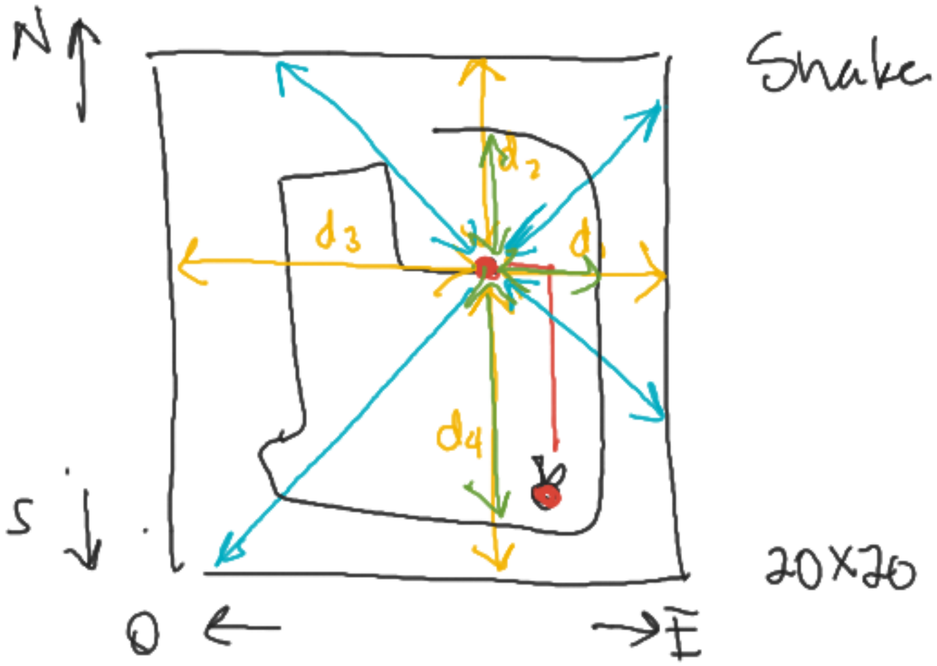
Construir la data (X_i, y_i)

1. Construir los features X_i
   - diseñar variables
   - limpiar datos
   - filtrar

2. Construir el target y_i



(X_i, y_i)



Snake

Descriptores:

Distancia de la cabeza a la fruta

$$\begin{cases} d = |x_f - x_s| + |y_f - y_s| \\ d_x = |x_f - x_s| \\ d_y = |y_f - y_s| \end{cases} \qquad (x_s, y_s) \qquad (x_f, y_f)$$

- Orientación de la serpiente

Etiqueta: 1, 2, 3 ó 4

~~N, S, E, O~~

One-hot encoding

(1,0,0,0) = N (0,0,1,0)

(0,1,0,0) = S (0,0,0,1)

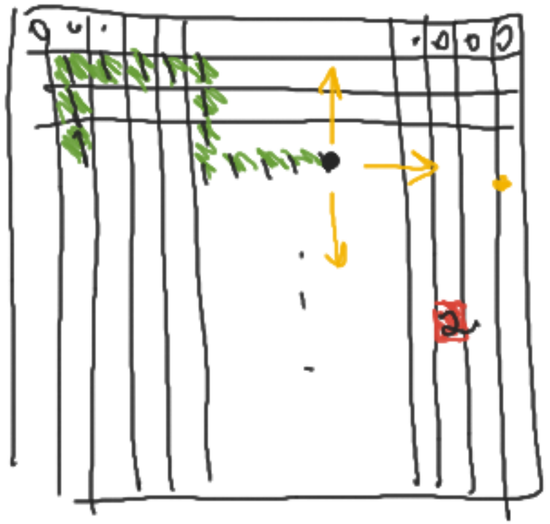
- #Espacios vacíos

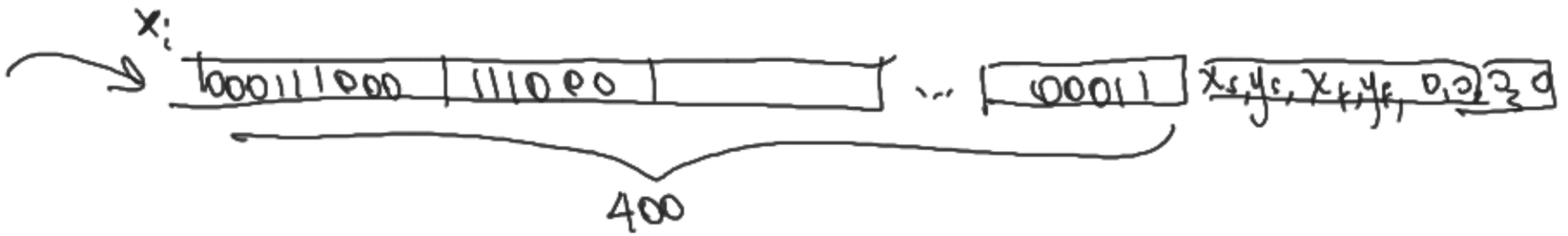
$M = 400 -$ tamaño serpiente

tamaño serpiente

- Distancias a los bordes

(d_1, d_2, d_3, d_4)





features x_i /

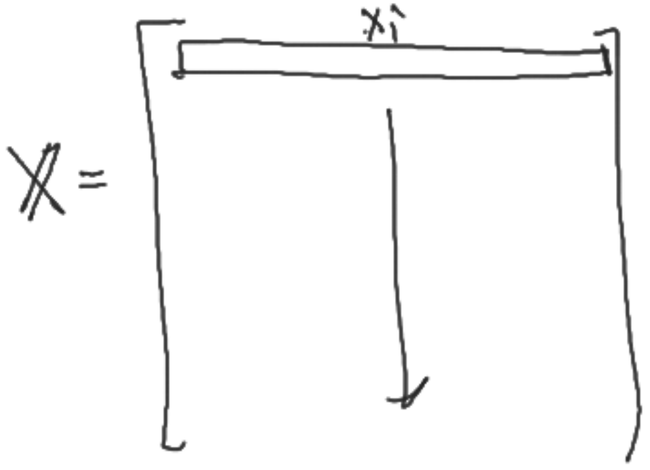
target y_i / 1, 2, 3, 4

(1,0,0,0)

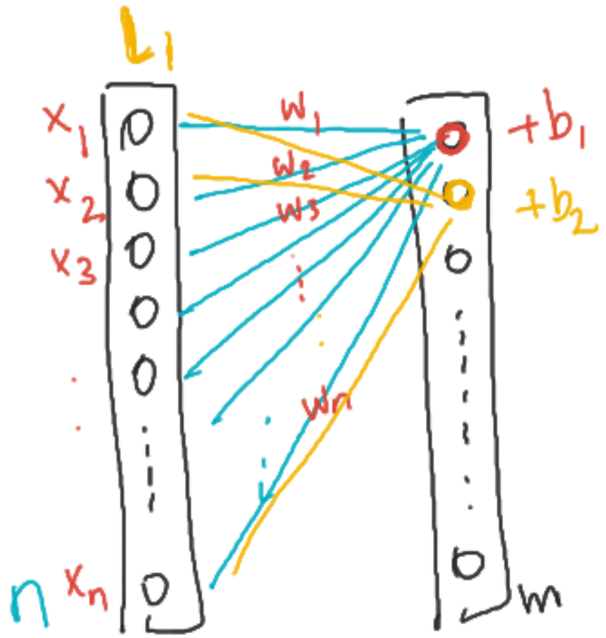
20×20

10×10

(x_i, y_i)



10^5
10^6



$$\varphi(w_1x_1 + w_2x_2 + \dots + w_nx_n + b)$$

m { $n+1$, $n+1$, $\vdots$, $n+1$

parámetros

$(n+1)m$