2 cont.

- Solving W_c, b_c, we solve

$$\bar{C}_t = \tanh(W_c[h_{t-1}, x_t] + b_c) = \overline{h_{t-1}}$$

$$\boxed{W_c = \begin{bmatrix} 1 \\ 0 \end{bmatrix} \quad b_c = 1}$$. Since

$$\bar{C}_t = \tanh(1 - h_{t-1})$$

$$= 1 - h_{t-1} = \overline{h_{t-1}} \quad \text{where} \quad 1 - h_{t-1} \in [0, 1]$$

- Solving W_o, b_o, we solve

$$h_t = O_t * \tanh(C_t)$$

$O_t = 1$ from $h_t = C_t$

$$O_t = \sigma(W_o[h_{t-1}, x_t] + b_o) = 1$$

$$\boxed{W_o = \begin{bmatrix} 0 \\ 0 \end{bmatrix} \quad b_o = 1}$$