

# Not implementation in a perceptron:

$$x_0 = 1$$
$$x_1 \in \{0, 1\}$$

$$w_0 = 1$$
$$w_1 = -1$$

$$\sum_{i=0}^1 x_i w_i = x_0 \cdot w_0 + x_1 \cdot w_1$$
$$= 1 - x_1 = \begin{cases} 1 & \text{if } x_1 = 0 \\ 0 & \text{if } x_1 = 1 \end{cases}$$

