Not implementation in a perceptron:

$X_0 = 1$

$X_1 \in \{0, 1\}$

$W_0 = 0.5$

$w_1 = -1$

$$\sum_{i=0}^{1} x_i w_i = X_0 \cdot w_0 + X_1 \cdot w_1$$

$$= 0.5 - X_1 = \begin{cases} 0.5 & \text{if } x_1 = 0 \\ -0.5 & \text{if } x_1 = 1 \end{cases}$$

$X_0 = 1$, $w_0 = b$

X_1, w_1

Σ

$net = X_0 \cdot w_0 + X_i \cdot w_i$

$sign(net)$