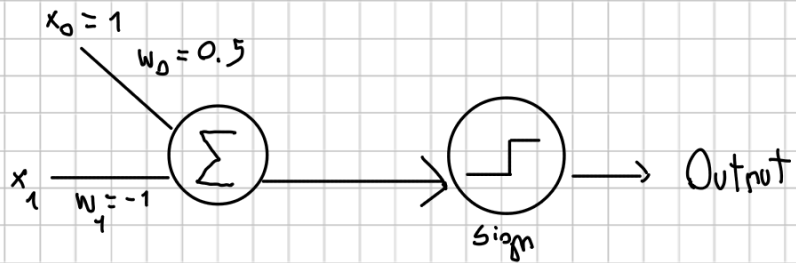


SALVATORE GATTO, 2014587

## Implementation of NOT



| A | NOT A |
|---|-------|
| 1 | 0     |
| 0 | 1     |

Let's consider  $x_0 = 1$  and  $w_0 = 0.5$ :

We can have two cases:

$$x_1 = 0 \Rightarrow \text{sign}(x_0 \cdot w_0 + x_1 \cdot w_1) = \text{sign}(0.5 + 0) = \text{sign}(0.5) = +1$$

$$x_1 = 1 \Rightarrow \text{sign}(x_0 \cdot w_0 + x_1 \cdot w_1) = \text{sign}(0.5 - 1) = \text{sign}(-0.5) = -1$$

✓