

x1	x2	Output
0	0	0
0	1	0
1	0	0
1	1	1

Here, I am setting the bias as -1 and threshold as 1

Weight  $w_1 = 1$ ,  $w_2 = 1$

The general equation,  $x_1 * w_1 + x_2 * w_2 + b$  [ $b = \text{bias}$ ]

So, for row 01:

$$x_1 * w_1 + x_2 * w_2 + b$$

$$0 * 1 + 0 * 1 - 1 = -1$$

Since, the eqn gives -1 and threshold = 1, so ans will be false

So, for row 02:

$$x_1 * w_1 + x_2 * w_2 + b$$

$$0 * 1 + 1 * 1 - 1 = 0$$

Since, the eqn gives 0 and threshold = 1, so ans will be false

So, for row 03:

$$x_1 * w_1 + x_2 * w_2 + b$$

$$1 * 1 + 0 * 1 - 1 = 0$$

Since, the eqn gives 0 and threshold = 1, so ans will be false

So, for row 04:

$$x_1 * w_1 + x_2 * w_2 + b$$

$$1 * 1 + 1 * 1 - 1 = 1$$

Since, the eqn gives -1 and threshold = 1, so ans will be true

