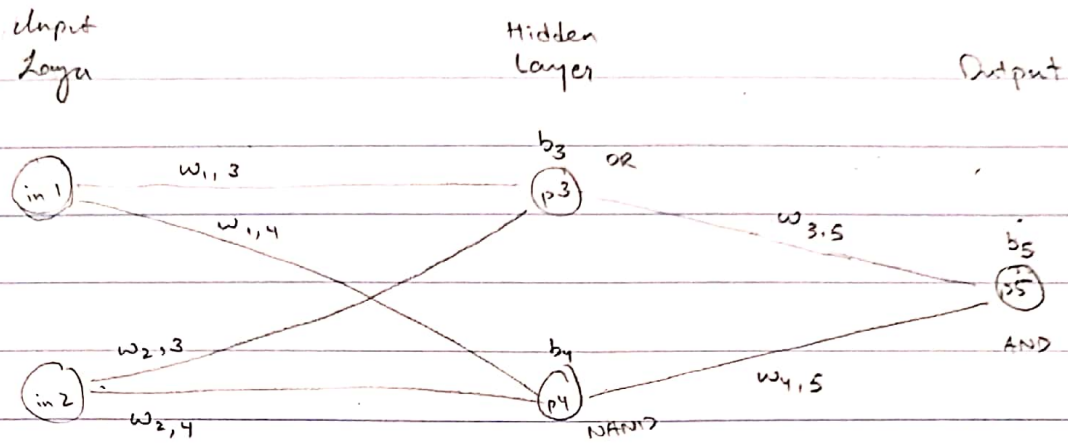


2-2-1 Perceptron XOR



Truth Table:

In ₁	In ₂	Out
1	1	0
1	0	1
0	1	1
0	0	0

$$w_{1,3} = 1$$

$$w_{2,3} = 1$$

$$b_3 = 0$$

$$w_{1,4} = -1$$

$$w_{2,4} = -2$$

$$b_4 = 3$$

$$w_{3,5} = 1$$

$$w_{4,5} = 2$$

$$b_5 = -2$$

$$w_1 \cdot in_1 + w_2 \cdot in_2 \geq -b$$

$$w = (1, 1) \quad b = 0 \quad f =$$

$$x = (0, 1) : 1$$

$$w = (-1, -1) \quad b = -2$$

$$x = (0, 1) : 1$$

$$w = (1, 1) \quad b = 1.5$$

$$x = (1, 1) : 1$$