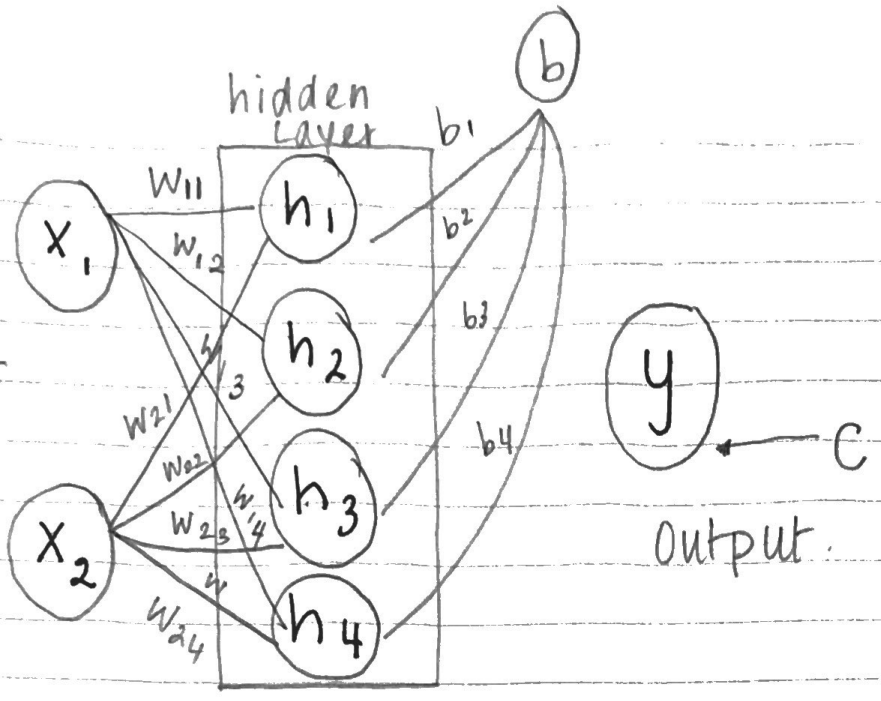
①



②

$$h_1 = \max\left[0, w_{11}x_1 + w_{21}x_2 + bl_1\right]$$

$$h_2 = \max\left[0, w_{12}x_1 + w_{22}x_2 + bl_2\right]$$

$$h_3 = \max\left[0, w_{13}x_1 + w_{23}x_2 + bl_3\right]$$

$$h_4 = \max\left[0, x_{14}x_1 + w_{24}x_2 + bl_4\right]$$

We Know : $\vec{X}^T = \begin{bmatrix} x_1 \\ x_2 \end{bmatrix}$ $W = \begin{bmatrix} w_{11} & w_{12} & w_{13} & w_{14} \\ w_{21} & w_{22} & w_{23} & w_{24} \end{bmatrix}$

$\vec{b} = \begin{bmatrix} b1 \\ b_2 \\ b_3 \\ b4 \end{bmatrix}$ $\therefore$ $\vec{h} = f\left[\vec{X}W + \vec{b}\right]$

$$y = g\left[v_1h_1 + v_2h_2 + v_3h_3 + v_4h_4 + C\right]$$

$$y = \vec{g}\left[\vec{v}^T\vec{h} + C\right]$$