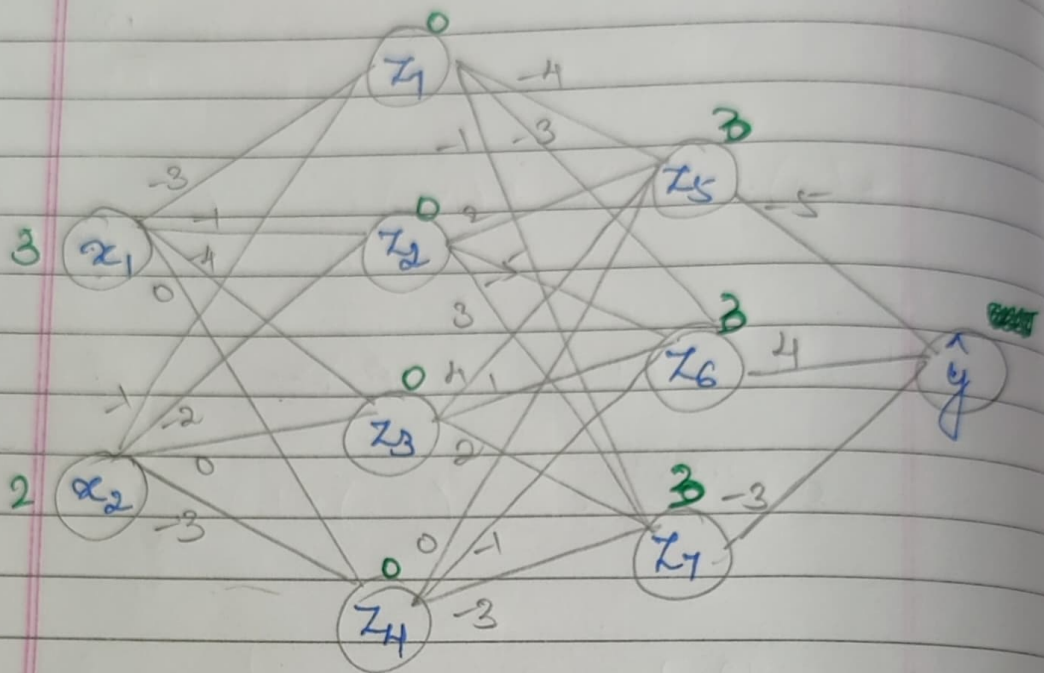


Deep Learning Assignment-1

$$w_0 = 3$$



$$z_1 = 3(-3) + 2(-1) + 3$$

$$= -8 \quad \underline{\text{ReLU}} \rightarrow 0$$

$$z_2 = 3 + 3(-1) + 2(-2)$$

$$= -4 \quad \underline{\text{ReLU}} \rightarrow 0$$

$$z_3 = 3 + 3(-4) + 2(0)$$

$$= -9 \quad \underline{\text{ReLU}} \rightarrow 0$$

$$z_4 = 3 + 3(0) + 2(-3)$$

$$= -3 \quad \underline{\text{ReLU}} \rightarrow 0$$

$$w_0 = 3$$

$$z_5 = 3 \text{ ReLU}, 3$$

$$z_6 = 3$$

$$z_7 = 3$$

$$\begin{aligned} z &= -5(3) + 4(3) - 3(3) + 3 \\ &= -15 + 12 - 9 + 3 \\ &= -9 \end{aligned}$$

$$\begin{aligned} \hat{y} &= \frac{1}{1 + e^{-z}} \\ &= \frac{1}{1 + e^9} \end{aligned}$$

$$\boxed{\hat{y} = 0.000123}$$