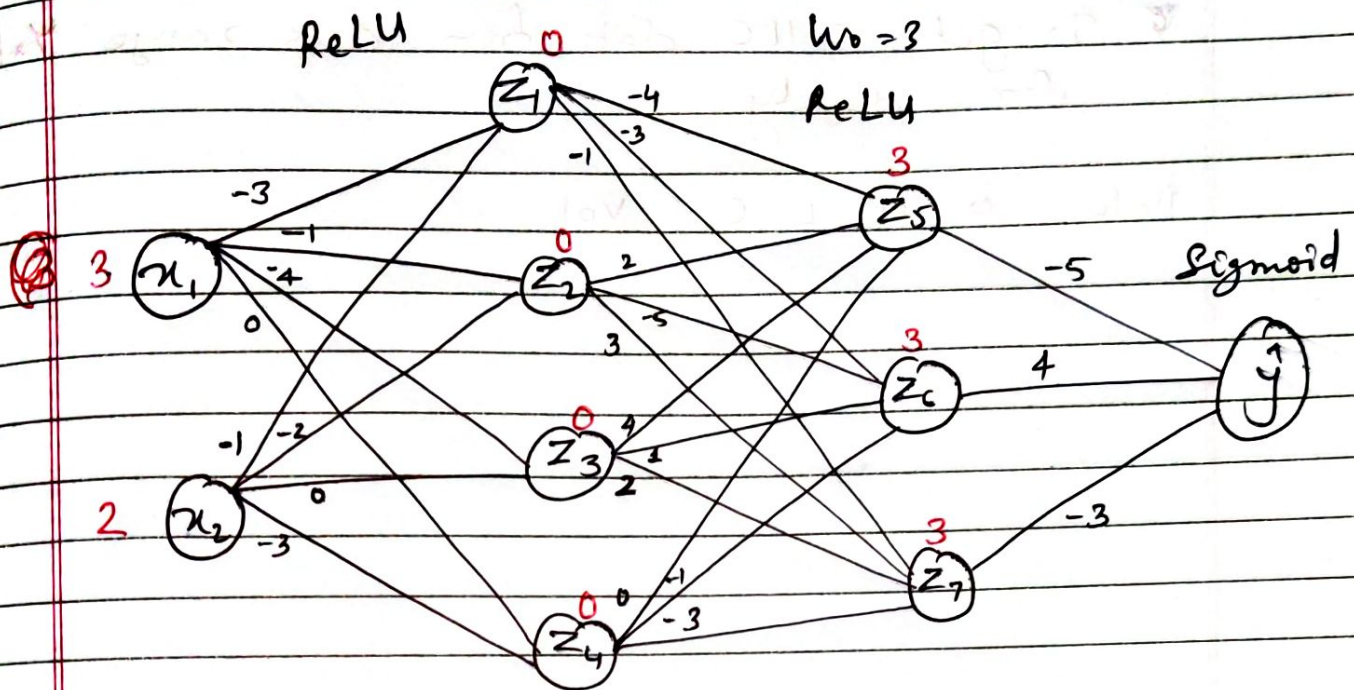


# DL Assignment -1

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Date \_\_\_\_\_

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$$\begin{aligned}
 z_1 &= 3(-3) + 2(-1) + 3 = -8 \xrightarrow{\text{ReLU}} 0 \\
 z_2 &= 3 + 3(-1) + 2(-2) = -4 \rightarrow 0 \\
 z_3 &= 3 + 3(-4) + 2(0) = -9 \rightarrow 0 \\
 z_4 &= 3 + 3(0) + 2(-3) = -3 \rightarrow 0 \\
 z_5 &= 3 \xrightarrow{\text{ReLU}} 3 \\
 z_6 &= 3 \\
 z_7 &= 3
 \end{aligned}$$

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

$$\hat{y} = \frac{1}{1 + e^{-Z}} = \frac{1}{1 + e^{-9}} = \boxed{0.000123}$$