21L-660

Zain Al Abidin   AI Home Task

$$a_4 = 0.2 + 0 + (-0.5) + (-0.4)$$
$$= 0.2 \quad -0.5 - 0.4$$
$$= -0.7$$

sigmoid -

$$\Rightarrow 0.33$$

$$a_5 = -0.3 + 0 + 0.2 + 0.2$$
$$= 0.1$$

sigmoid

$$\Rightarrow 0.52$$

$$y = (0.33)(-0.3) + 0.52(-0.2) + 0.1$$
$$= -0.099 + (-0.104) + 0.1$$
$$= -0.103$$

sigmoid

$$\Rightarrow 0.47$$

$$\frac{SE}{\delta w_{46}} = -(0-0.47) \times 0.47 \times (1-0.47) \times 0.33$$

$$\Rightarrow 0.039$$

$$W_{46} \text{ new} \Rightarrow -0.3 - (0.1 \times 0.039)$$
$$\Rightarrow 0.3039$$

$$\frac{SE}{\delta w_{56}} = -(0-0.47) \times 0.47 \times (1-0.47) \times 0.54 \Rightarrow 0.061$$

$$W_{56} \text{ new} \Rightarrow -0.2 - (0.1 \times 0.061)$$
$$\Rightarrow -0.2061$$