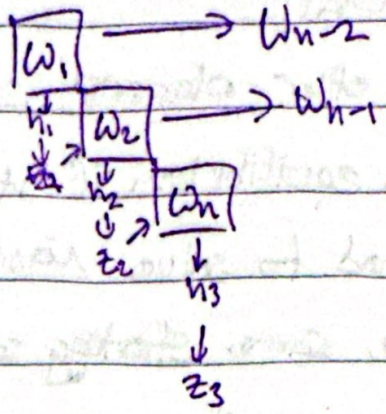
W_1, W_2, W_n



$$\frac{\partial E}{\partial W_n} = \frac{\partial E}{\partial z_3} \frac{\partial z_3}{\partial h_3} \frac{\partial h_3}{\partial W_n}$$

$$\frac{\partial E}{\partial W_{n-1}} = \frac{\partial E}{\partial W_n} \frac{\partial W_n}{\partial z_{n-1}} \frac{\partial z_{n-1}}{\partial h_{n-1}} \frac{\partial h_{n-1}}{\partial W_{n-1}}$$

$$\frac{\partial E}{\partial W_{n-2}} = \frac{\partial E}{\partial W_{n-1}} \frac{\partial W_{n-1}}{\partial z_{n-2}} \frac{\partial z_{n-2}}{\partial h_{n-2}} \frac{\partial h_{n-2}}{\partial W_{n-2}}$$

$$W_{new} = W_{old} - (\text{learning rate}) \cdot \frac{\partial E}{\partial old}$$