$$\frac{\partial J}{\partial W^{(1)}} = \frac{\partial J}{\partial z} X^T + \lambda W^{(1)}$$

$$\frac{\partial J}{\partial S} = 1$$

$$+$$

$$\frac{\partial J}{\partial J} = 1$$

$$l_2$$

$$\frac{\partial J}{\partial W^{(2)}} = \frac{\partial J}{\partial o} h^T + \lambda W^{(2)}$$

$$\frac{\partial J}{\partial L} = 1$$

$$\frac{\partial J}{\partial y} = \frac{\partial J}{\partial L} \frac{\partial L}{\partial y}$$

$$\times$$

$$\frac{\partial J}{\partial z} = \frac{\partial J}{\partial h} \phi'$$

$$\phi$$

$$\frac{\partial J}{\partial h} = \frac{\partial J}{\partial o} W^{(2)T}$$

$$\times$$

$$\frac{\partial J}{\partial o} = \frac{\partial J}{\partial L} \frac{\partial L}{\partial o}$$

$$l$$

$$\backprime \quad \frac{\partial J}{\partial x} = \frac{\partial J}{\partial z} W^{(1)T}$$