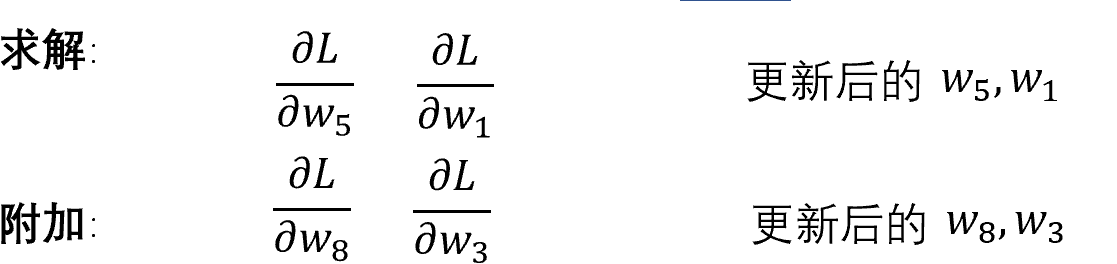


**求：**



**解：**

1. **正向传播**

**输入层🡪隐藏层**

1）神经元的输入加权和

=0.15\*0.05+0.2\*0.10+0.35=0.3775

2）神经元的输出

=0.59326999

同理神经元的输出

=0.25\*0.05+0.3\*0.10+0.35=0.3925

=0.59688438

**隐藏层->输出层**

计算神经元的输出

=0.40\*0.59326999+0.45\*0.59688438+0.60

=1.105905967 *=*0.75136507

计算神经元的输出

4

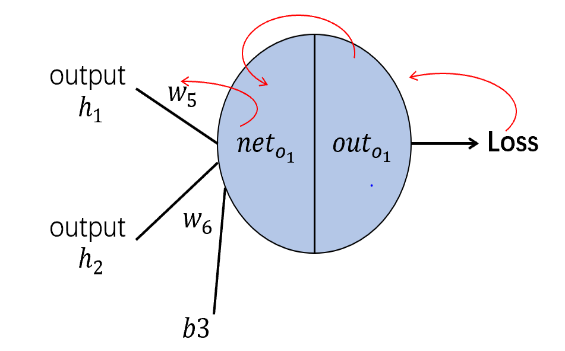
=0.50\*0.59326999+0.55\*0.59688438+0.60

=1.2249214039999998 *=*0.77292847

输出值[0.75136507，0.77292847] 真实值[0.01,0.99]

**二 计算总误差**

0.2983711080763229

**三 反向传播**

1)

=0.74136507

*Sigmod（）\*（1-Sigmod（））=*0.186815602

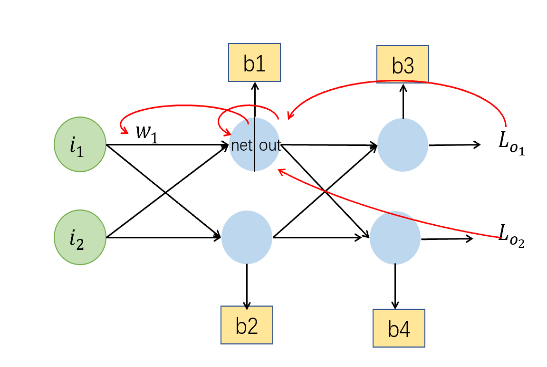
=0.59326999

=0.74136507\*0.186815602\*0.59326999

=0.08216704040603146

更新后等于

**=** =0.4-0.5\*0.08216704040603146=0.35891647979698427

**2)**

=*\**

=-(0.01-0.75136507)\*0.1868156\*0.40

=0.05539942414843679

=*\**

=-(0.99-0.77292847)\*0.17551005\*0.50

=-0.019049117541938252

= 0.05539942414843679-0.019049117541938252

= 0.036350306606498545

= *Sigmod（）\*（1-Sigmod（））=*0.24130071

0.05

=0.036350306606498545\*0.241300709\*0.05

=0.00043856773782577417

更新后等于

**= =** 0.15-0.5\*0.00043856773782577417

=0.1497807161310871