**nn.CrossEntropyLoss()**

CrossEntropyLoss等价于先求log\_softmax再用NLLLoss

设criterion是nn.CrossEntropyLoss()的实例，则criterion(output,target)计算损失

**输入输出**

输入：

output：batch\_size×num\_class

target：batch\_size  
输出：标量

import torch.nn.functional as F

target = torch.LongTensor([0,2])*#64位整型*

prob = torch.Tensor([[1,2,3],[4,5,2]])*#32位浮点型*

log\_softmax\_prob = F.log\_softmax(prob,dim=1)

criterion1 = nn.NLLLoss()

criterion2 = nn.CrossEntropyLoss()

loss1 = criterion1(log\_softmax\_prob,target)

loss2 = criterion2(prob,target)

print(loss1==loss2)

>>>

tensor(True)