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torchsummary output:

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      Conv2d-1      [-1, 28, 28, 28]      784
    BatchNorm2d-2   [-1, 28, 28, 28]      56
      ReLU-3        [-1, 28, 28, 28]      0
    AvgPool2d-4     [-1, 28, 14, 14]      0
      Conv2d-5      [-1, 16, 14, 14]     464
      ReLU-6        [-1, 16, 14, 14]      0
  AdaptiveAvgPool2d-7 [-1, 16, 28, 28]      0
      Conv2d-8      [-1, 56, 14, 14]    14,168
    BatchNorm2d-9   [-1, 56, 14, 14]     112
      ReLU-10       [-1, 56, 14, 14]      0
    AvgPool2d-11    [-1, 56, 7, 7]      0
      Conv2d-12     [-1, 136, 7, 7]    68,680
    BatchNorm2d-13  [-1, 136, 7, 7]     272
      ReLU-14       [-1, 136, 7, 7]      0
    AvgPool2d-15    [-1, 136, 3, 3]      0
      Conv2d-16     [-1, 16, 3, 3]     2,192
      ReLU-17       [-1, 16, 3, 3]      0
  AdaptiveAvgPool2d-18 [-1, 16, 16, 16]      0
    Dropout-19      [-1, 1224]          0
      Linear-20     [-1, 10]          12,250
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Total params: 98,978
Trainable params: 98,978
Non-trainable params: 0
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Input size (MB): 0.01
Forward/backward pass size (MB): 1.16
Params size (MB): 0.38
Estimated Total Size (MB): 1.55
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Methods I used:

- 1.我使用知識蒸餾去做模型壓縮，teacher model 是助教給的 Resnet50，student model 是三層卷積神經網路，除了讓 student model 去學習 teacher 的 soft label，我還有讓 student 去學 teacher 裡面的特徵，和真正的 label。
- 2.訓練時我每個 epoch 都有做 validation，然後選 accuracy 最好的。
- 3.訓練時有做 random agumentation，test 時沒有。