AlexNet (GPU)

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root@autodl-container-c35b448a49-beb6326b:~/autodl-tmp# python AlexNet.py
Conv2d output shape:      torch.Size([1, 96, 54, 54])
ReLU output shape:        torch.Size([1, 96, 54, 54])
MaxPool2d output shape:   torch.Size([1, 96, 26, 26])
Conv2d output shape:      torch.Size([1, 256, 26, 26])
ReLU output shape:        torch.Size([1, 256, 26, 26])
MaxPool2d output shape:   torch.Size([1, 256, 12, 12])
Conv2d output shape:      torch.Size([1, 384, 12, 12])
ReLU output shape:        torch.Size([1, 384, 12, 12])
Conv2d output shape:      torch.Size([1, 384, 12, 12])
ReLU output shape:        torch.Size([1, 384, 12, 12])
Conv2d output shape:      torch.Size([1, 256, 12, 12])
ReLU output shape:        torch.Size([1, 256, 12, 12])
MaxPool2d output shape:   torch.Size([1, 256, 5, 5])
Flatten output shape:     torch.Size([1, 6400])
Linear output shape:      torch.Size([1, 4096])
ReLU output shape:        torch.Size([1, 4096])
Dropout output shape:     torch.Size([1, 4096])
Linear output shape:      torch.Size([1, 4096])
ReLU output shape:        torch.Size([1, 4096])
Dropout output shape:     torch.Size([1, 4096])
Linear output shape:      torch.Size([1, 10])
Downloading http://fashion-mnist.s3-website.eu-central-1.amazonaws.com/train-
images-idx3-ubyte.gz
Downloading http://fashion-mnist.s3-website.eu-central-1.amazonaws.com/train-
images-idx3-ubyte.gz to ./data/FashionMNIST/raw/train-images-idx3-ubyte.gz
100%|
████████████████████████████████████████████████████████████████████
██████| 26.4M/26.4M [00:34<00:00, 767kB/s]
Extracting ./data/FashionMNIST/raw/train-images-idx3-ubyte.gz to
./data/FashionMNIST/raw

Downloading http://fashion-mnist.s3-website.eu-central-1.amazonaws.com/train-
labels-idx1-ubyte.gz
Downloading http://fashion-mnist.s3-website.eu-central-1.amazonaws.com/train-
labels-idx1-ubyte.gz to ./data/FashionMNIST/raw/train-labels-idx1-ubyte.gz
100%|
████████████████████████████████████████████████████████████████████
██████| 29.5k/29.5k [00:00<00:00, 151kB/s]
Extracting ./data/FashionMNIST/raw/train-labels-idx1-ubyte.gz to
./data/FashionMNIST/raw

Downloading http://fashion-mnist.s3-website.eu-central-1.amazonaws.com/t10k-
images-idx3-ubyte.gz
Downloading http://fashion-mnist.s3-website.eu-central-1.amazonaws.com/t10k-
images-idx3-ubyte.gz to ./data/FashionMNIST/raw/t10k-images-idx3-ubyte.gz
100%|
████████████████████████████████████████████████████████████████████
██████| 4.42M/4.42M [00:01<00:00, 2.79MB/s]
Extracting ./data/FashionMNIST/raw/t10k-images-idx3-ubyte.gz to
./data/FashionMNIST/raw
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training on cuda
epoch 1, loss 2.3015, train acc 0.118, test acc 0.200, time 53.4 sec
epoch 2, loss 2.2254, train acc 0.209, test acc 0.473, time 52.6 sec
epoch 3, loss 1.0720, train acc 0.572, test acc 0.643, time 52.3 sec
epoch 4, loss 0.8368, train acc 0.676, test acc 0.703, time 51.9 sec
epoch 5, loss 0.7198, train acc 0.729, test acc 0.734, time 52.7 sec
epoch 6, loss 0.6273, train acc 0.766, test acc 0.783, time 52.0 sec
epoch 7, loss 0.5616, train acc 0.788, test acc 0.794, time 52.4 sec
epoch 8, loss 0.5198, train acc 0.805, test acc 0.803, time 52.7 sec
epoch 9, loss 0.4837, train acc 0.818, test acc 0.819, time 52.2 sec
epoch 10, loss 0.4540, train acc 0.831, test acc 0.832, time 52.7 sec
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```