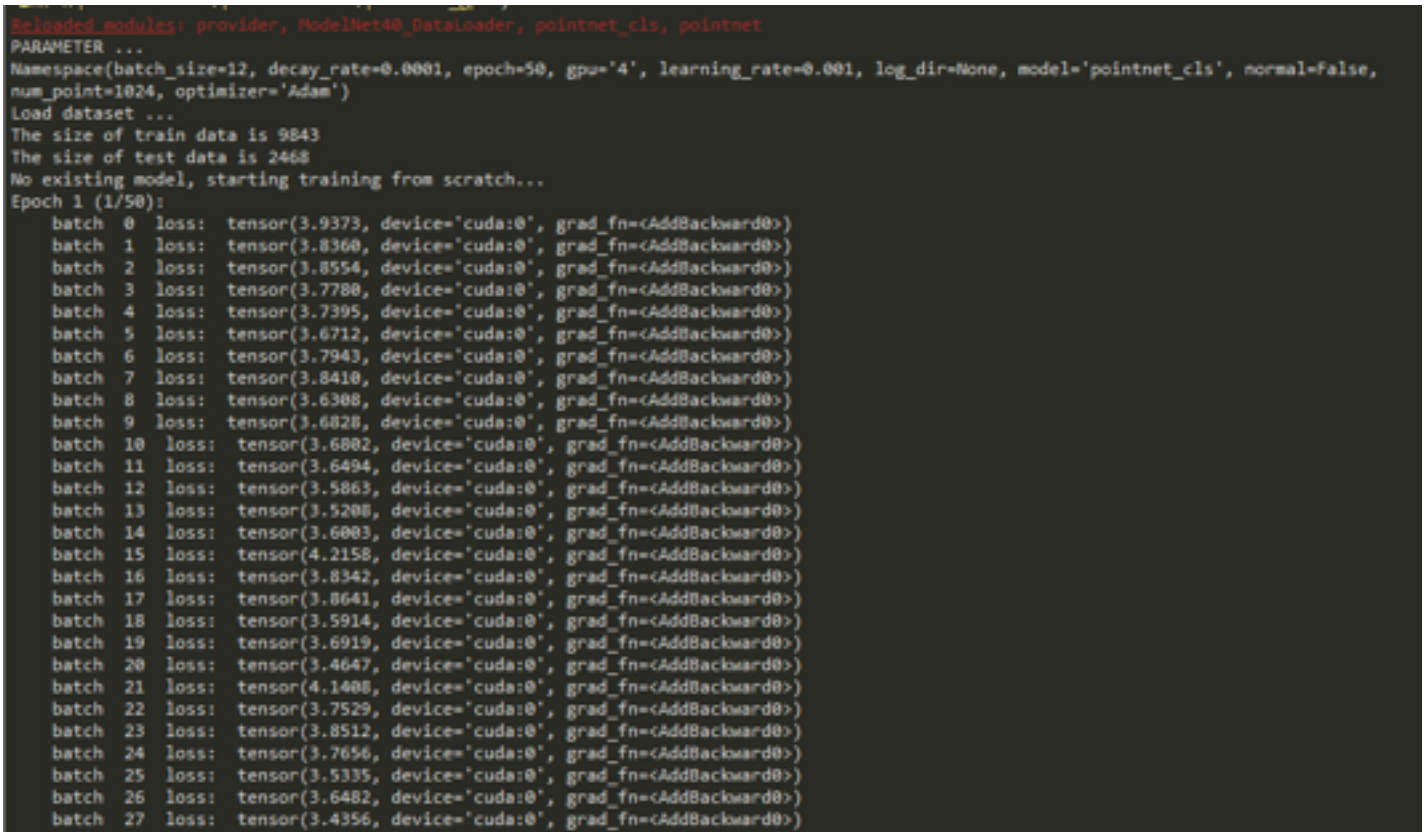
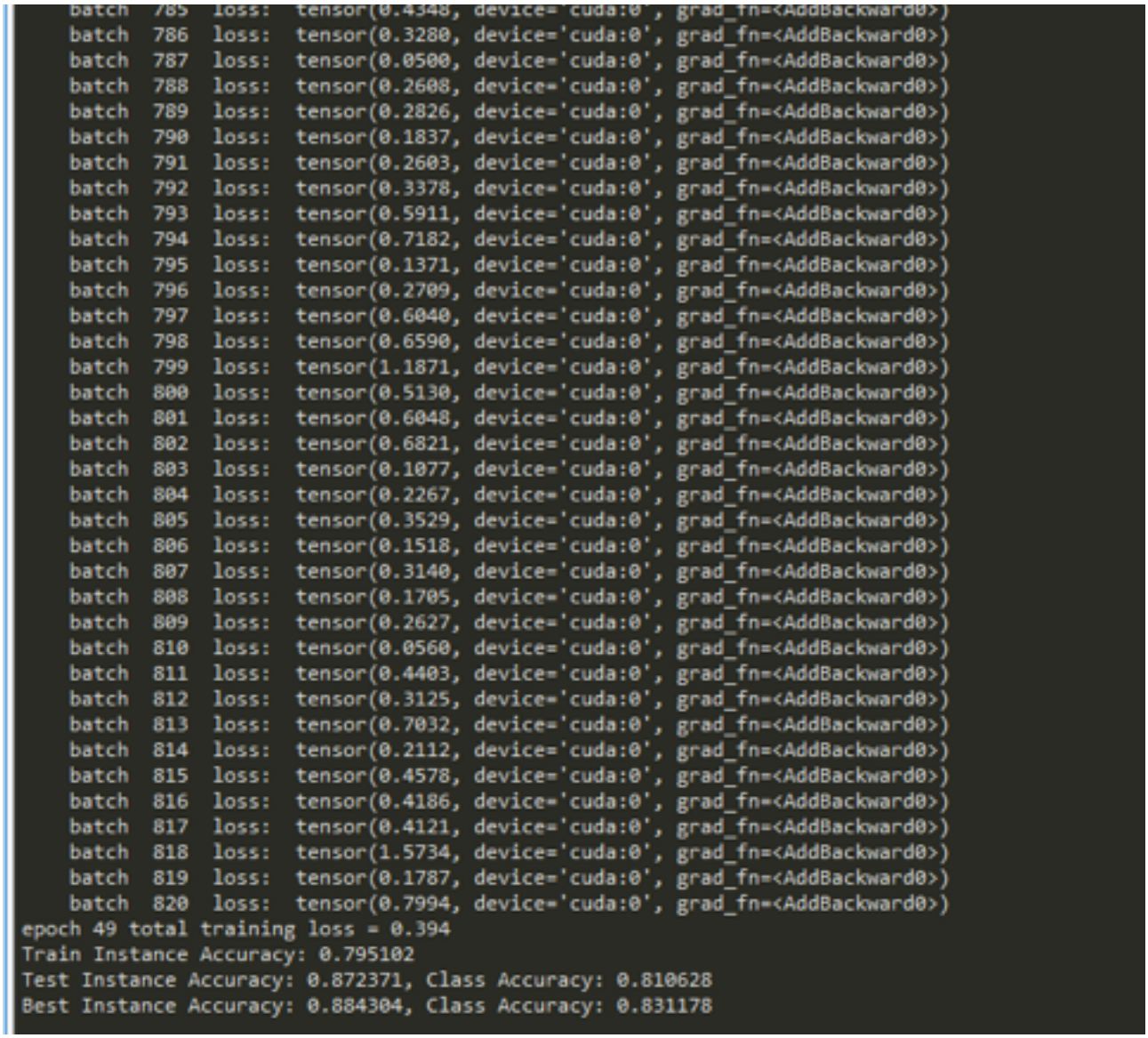
Netzwerk Training



```
Reloaded modules: provider, ModelNet40_DataLoader, pointnet_cls, pointnet
PARAMETER ...
Namespace(batch_size=12, decay_rate=0.0001, epoch=50, gpu='4', learning_rate=0.001, log_dir=None, model='pointnet_cls', normal=False,
num_point=1024, optimizer='Adam')
Load dataset ...
The size of train data is 9843
The size of test data is 2468
No existing model, starting training from scratch...
Epoch 1 (1/50):
    batch  0  loss:  tensor(3.9373, device='cuda:0', grad_fn=<AddBackward0>)
    batch  1  loss:  tensor(3.8360, device='cuda:0', grad_fn=<AddBackward0>)
    batch  2  loss:  tensor(3.8554, device='cuda:0', grad_fn=<AddBackward0>)
    batch  3  loss:  tensor(3.7780, device='cuda:0', grad_fn=<AddBackward0>)
    batch  4  loss:  tensor(3.7395, device='cuda:0', grad_fn=<AddBackward0>)
    batch  5  loss:  tensor(3.6712, device='cuda:0', grad_fn=<AddBackward0>)
    batch  6  loss:  tensor(3.7943, device='cuda:0', grad_fn=<AddBackward0>)
    batch  7  loss:  tensor(3.8410, device='cuda:0', grad_fn=<AddBackward0>)
    batch  8  loss:  tensor(3.6308, device='cuda:0', grad_fn=<AddBackward0>)
    batch  9  loss:  tensor(3.6828, device='cuda:0', grad_fn=<AddBackward0>)
    batch  10  loss:  tensor(3.6802, device='cuda:0', grad_fn=<AddBackward0>)
    batch  11  loss:  tensor(3.6494, device='cuda:0', grad_fn=<AddBackward0>)
    batch  12  loss:  tensor(3.5863, device='cuda:0', grad_fn=<AddBackward0>)
    batch  13  loss:  tensor(3.5208, device='cuda:0', grad_fn=<AddBackward0>)
    batch  14  loss:  tensor(3.6003, device='cuda:0', grad_fn=<AddBackward0>)
    batch  15  loss:  tensor(4.2158, device='cuda:0', grad_fn=<AddBackward0>)
    batch  16  loss:  tensor(3.8342, device='cuda:0', grad_fn=<AddBackward0>)
    batch  17  loss:  tensor(3.8641, device='cuda:0', grad_fn=<AddBackward0>)
    batch  18  loss:  tensor(3.5914, device='cuda:0', grad_fn=<AddBackward0>)
    batch  19  loss:  tensor(3.6919, device='cuda:0', grad_fn=<AddBackward0>)
    batch  20  loss:  tensor(3.4647, device='cuda:0', grad_fn=<AddBackward0>)
    batch  21  loss:  tensor(4.1408, device='cuda:0', grad_fn=<AddBackward0>)
    batch  22  loss:  tensor(3.7529, device='cuda:0', grad_fn=<AddBackward0>)
    batch  23  loss:  tensor(3.8512, device='cuda:0', grad_fn=<AddBackward0>)
    batch  24  loss:  tensor(3.7656, device='cuda:0', grad_fn=<AddBackward0>)
    batch  25  loss:  tensor(3.5335, device='cuda:0', grad_fn=<AddBackward0>)
    batch  26  loss:  tensor(3.6482, device='cuda:0', grad_fn=<AddBackward0>)
    batch  27  loss:  tensor(3.4356, device='cuda:0', grad_fn=<AddBackward0>)
```

Epoch ＝ 50 情况下的运行结果



Test的结果（提前给定的check point）