SimpleNN

```
class SimpleNN(nn.Module):
    def __init__(self):
        super(SimpleNN, self).__init__()
        self.conv_stack = nn.Sequential(
            nn.Conv2d(3, 64, kernel_size=3, stride=1, padding
            nn.ReLU(),
            nn.MaxPool2d(kernel_size=2, stride=2, padding=0)
        )
        self.fc_stack = nn.Sequential(
            nn.Linear(64 * 112 * 112, 1000),
            nn.ReLU(),
            nn.Linear(1000, 2)
        )
    def forward(self, x):
        x = self.conv_stack(x)
        x = torch.flatten(x, 1)
        logits = self.fc_stack(x)
        return logits
Epoch 1
/local-pool-83/cheng-yao/.local/lib/python3.10/site-packages/
  Variable._execution_engine.run_backward( # Calls into the
loss: 0.767739 [
                  0/ 100]
Parameters uploaded successfully.
Test Error:
Accuracy: 50.0%, Avg loss: 113.175430
Epoch 2
loss: 94.192284 [ 0/ 100]
 Parameters uploaded successfully.
Test Error:
```

SimpleNN 1

```
Accuracy: 50.0%, Avg loss: 220.910248
Epoch 3
loss: 225.438126 [ 0/ 100]
Parameters uploaded successfully.
fail
Test Error:
Accuracy: 50.0%, Avg loss: 80.860474
Epoch 4
    ------
loss: 84.752228 [ 0/ 100]
Parameters uploaded successfully.
fail
Test Error:
Accuracy: 50.0%, Avg loss: 5.507360
Epoch 5
loss: 4.956311 [ 0/ 100]
Parameters uploaded successfully.
fail
Test Error:
Accuracy: 50.0%, Avg loss: 23.746450
Epoch 6
_____
loss: 21.908087 [ 0/ 100]
Parameters uploaded successfully.
fail
Test Error:
Accuracy: 50.0%, Avg loss: 6.155574
Epoch 7
loss: 4.776606 [ 0/ 100]
Parameters uploaded successfully.
```

SimpleNN 2

```
fail
Test Error:
Accuracy: 50.0%, Avg loss: 13.720282
Epoch 8
loss: 14.371814 [ 0/ 100]
Parameters uploaded successfully.
fail
Test Error:
Accuracy: 50.0%, Avg loss: 6.857956
Epoch 9
loss: 7.988214 [ 0/ 100]
Parameters uploaded successfully.
fail
Test Error:
Accuracy: 50.0%, Avg loss: 7.196001
Epoch 10
______
loss: 6.102106 [ 0/ 100]
Parameters uploaded successfully.
fail
Test Error:
Accuracy: 50.0%, Avg loss: 5.128838
Done
```

SimpleNN 3