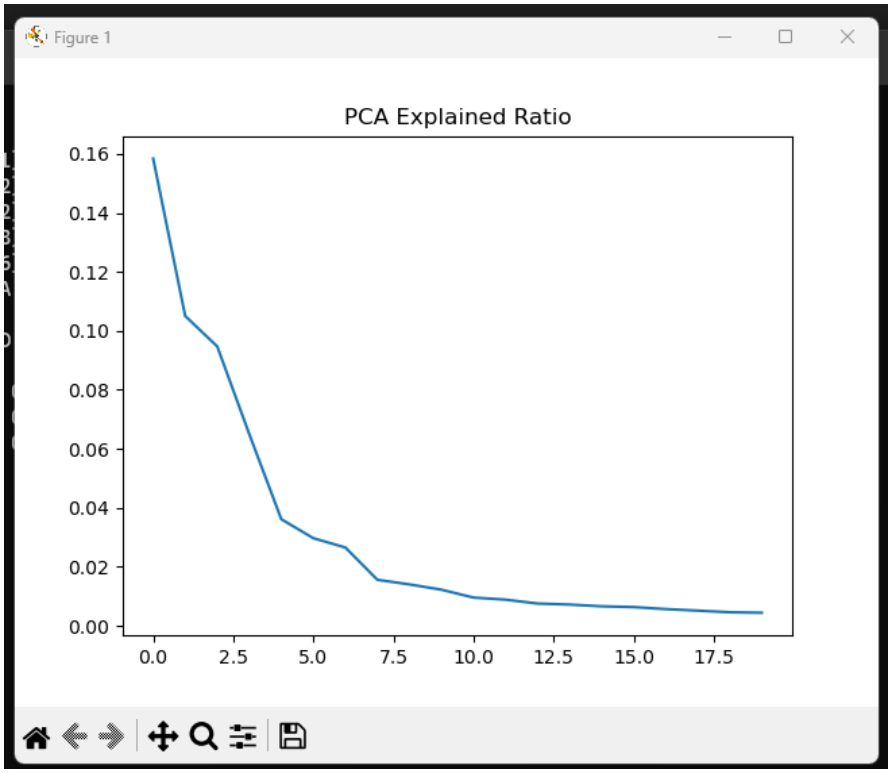
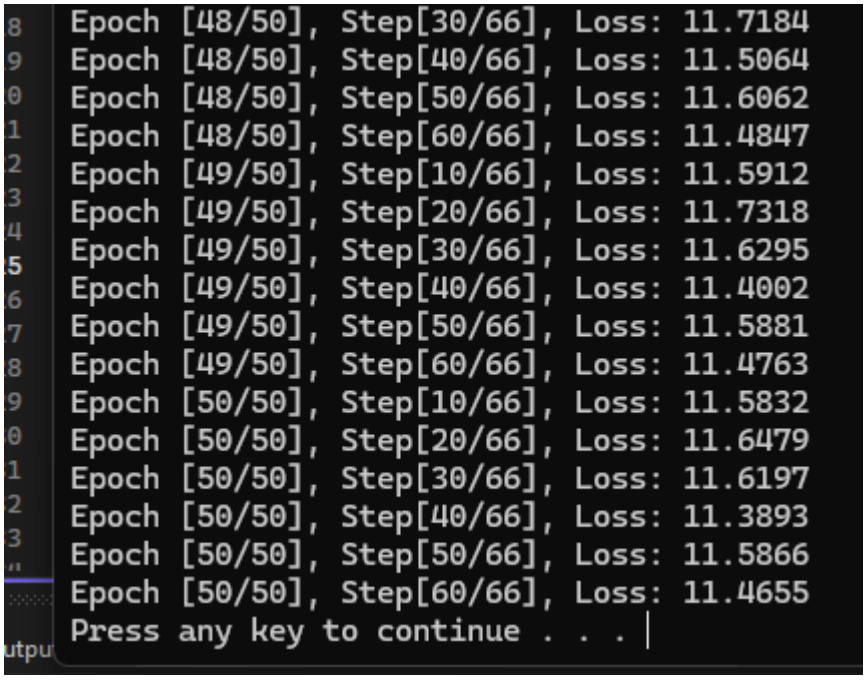
ASSIGNMENT # 11A

PROBLEM 01 OUTPUT , CancerAnalysisPCANN.py

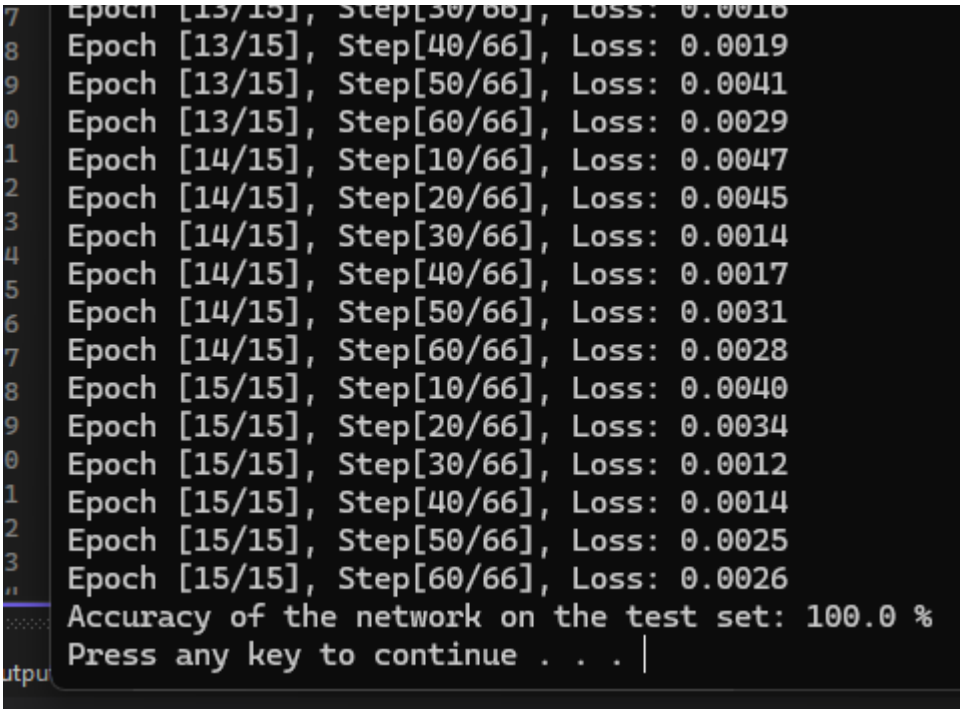



```
Epoch [18/20], Step[20/66], Loss: 0.9051
Epoch [18/20], Step[30/66], Loss: 0.9054
Epoch [18/20], Step[40/66], Loss: 1.0051
Epoch [18/20], Step[50/66], Loss: 0.9049
Epoch [18/20], Step[60/66], Loss: 0.9059
Epoch [19/20], Step[10/66], Loss: 0.9049
Epoch [19/20], Step[20/66], Loss: 0.9051
Epoch [19/20], Step[30/66], Loss: 0.9054
Epoch [19/20], Step[40/66], Loss: 1.0050
Epoch [19/20], Step[50/66], Loss: 0.9049
Epoch [19/20], Step[60/66], Loss: 0.9058
Epoch [20/20], Step[10/66], Loss: 0.9049
Epoch [20/20], Step[20/66], Loss: 0.9051
Epoch [20/20], Step[30/66], Loss: 0.9053
Epoch [20/20], Step[40/66], Loss: 1.0050
Epoch [20/20], Step[50/66], Loss: 0.9049
Epoch [20/20], Step[60/66], Loss: 0.9057
Accuracy of the network on the test set: 100.0 %
Press any key to continue . . .
```

PROBLEM 02 OUTPUT, AutoEncoderCancerAnalysis.py

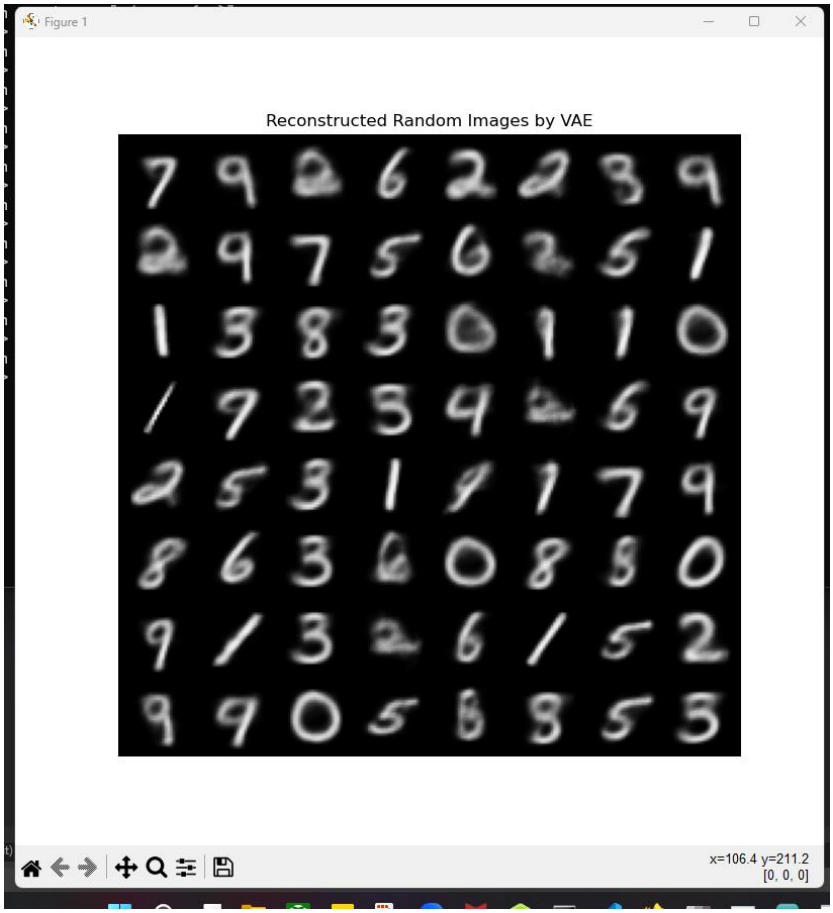


PROBLEM 02 OUTPUT, AEClassifierTrainTest.py



PROBLEM 03 OUTPUT, VAESimple.py

```
====> Epoch: 2 Average loss: 488.4627
Train Epoch: 10 [0/60000 (0%)]  Loss: 163.324160
====> Epoch: 3 Average loss: 638.7028
Train Epoch: 10 [0/60000 (0%)]  Loss: 150.105488
====> Epoch: 4 Average loss: 786.9739
Train Epoch: 10 [0/60000 (0%)]  Loss: 146.388643
====> Epoch: 5 Average loss: 933.7700
Train Epoch: 10 [0/60000 (0%)]  Loss: 156.689316
====> Epoch: 6 Average loss: 1079.2944
Train Epoch: 10 [0/60000 (0%)]  Loss: 144.740713
====> Epoch: 7 Average loss: 1223.9790
Train Epoch: 10 [0/60000 (0%)]  Loss: 143.486777
====> Epoch: 8 Average loss: 1367.8347
Train Epoch: 10 [0/60000 (0%)]  Loss: 150.636914
====> Epoch: 9 Average loss: 1510.9266
Press any key to continue . . .
```



PROBLEM 04 OUTPUT, VAEClassifierNetwork.py