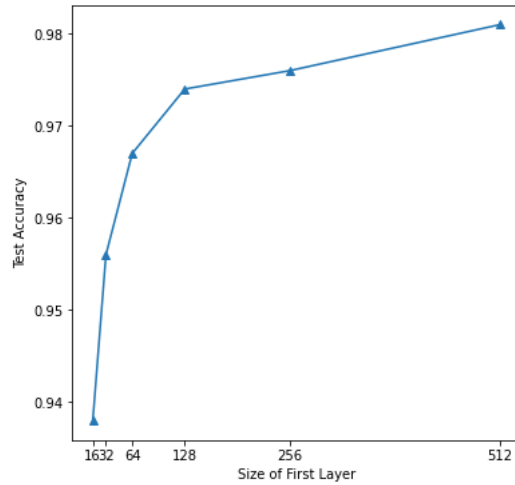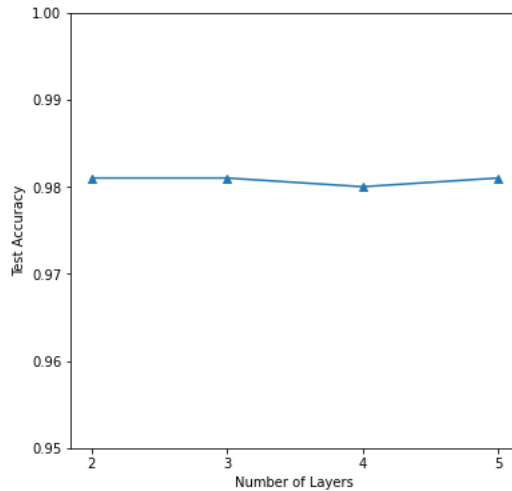# CSCE 636 HW1
Name: Tian Liu

Please see the attached python notebook for the code.

(1) Size of first layer vs. Test Accuracy

It is observed that the larger size results in larger test accuracy.

(2) Number of layers vs. Test Accuracy

It is observed that the test accuracy barely changes with the number of layers, indicating that a simple 2-layer neural network model is sufficient for this task.

Number of layers	Layer size (The activations are all relu except softmax for the last layer)
2	L1=512, L2=10
3	L1=512, L2=256, L3=10
4	L1=512, L2=256, L3=128, L4=10
5	L1=512, L2=256, L3=128, L4=64, L5=10