

```

plt.xlabel('Epoch')
plt.ylabel('Accuracy')
plt.legend()
plt.show()

print('\n \n accuracy and lost results on test dataset using nurel network algorithm \n')
model.evaluate(X_test, y_test)

```

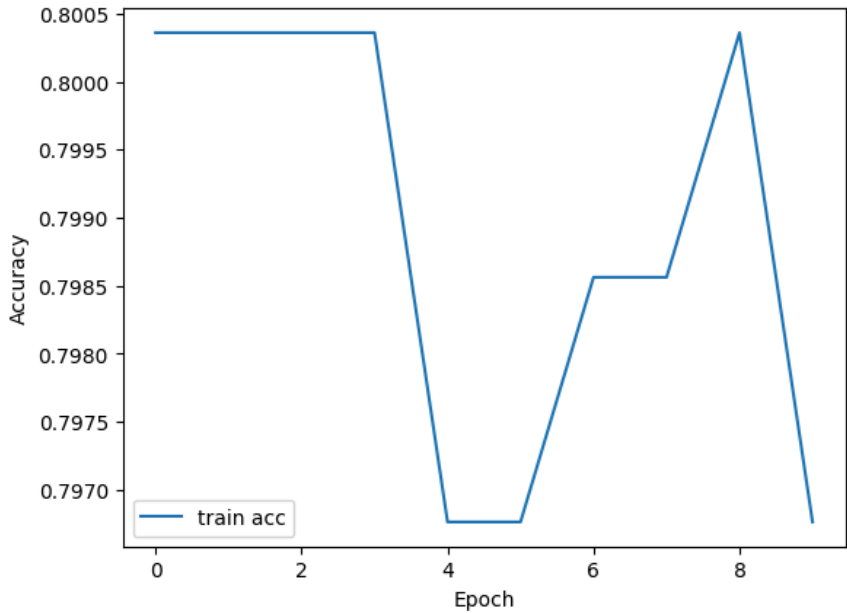


accuracy and lost results on train dataset using nurel network algorithm

```

Epoch 1/10
18/18 ----- 1s 5ms/step - accuracy: 0.8271 - loss: 0.4938
Epoch 2/10
18/18 ----- 0s 6ms/step - accuracy: 0.8123 - loss: 0.5037
Epoch 3/10
18/18 ----- 0s 6ms/step - accuracy: 0.8232 - loss: 0.4792
Epoch 4/10
18/18 ----- 0s 10ms/step - accuracy: 0.7975 - loss: 0.5321
Epoch 5/10
18/18 ----- 0s 8ms/step - accuracy: 0.7808 - loss: 0.5239
Epoch 6/10
18/18 ----- 0s 9ms/step - accuracy: 0.8182 - loss: 0.4960
Epoch 7/10
18/18 ----- 0s 9ms/step - accuracy: 0.7653 - loss: 0.5288
Epoch 8/10
18/18 ----- 0s 8ms/step - accuracy: 0.8043 - loss: 0.4760
Epoch 9/10
18/18 ----- 0s 8ms/step - accuracy: 0.8012 - loss: 0.4972
Epoch 10/10
18/18 ----- 0s 9ms/step - accuracy: 0.7891 - loss: 0.4886

```



accuracy and lost results on test dataset using nurel network algorithm

```

5/5 ----- 0s 8ms/step - accuracy: 0.7431 - loss: 0.5880
[0.5412213206291199, 0.769784152507782]

```