```
#Create the DecisionTreeClassifier from sklearn
Decisionclf = DecisionTreeClassifier(random_state=42)
Decisionclf.fit(X_train, y_train)

# Predict on the test set and calculate accuracy
y_pred = Decisionclf.predict(X_test)
accuracy = accuracy_score(y_test, y_pred)
print("Accuracy: ", accuracy)
```

2] ✓ 0.7s

```
Accuracy:  0.9940464377852749
```

Decision Tree classifier accuracy
NSL -KDD

```
Accuracy:  0.9900773963087914
```

```
GClassifier = GaussianNB()
GClassifier.fit(X_train, y_train)

# Predict on test set and calculate accuracy
y_pred = GClassifier.predict(X_test)
accuracy = accuracy_score(y_test, y_pred)
print("Accuracy: ", accuracy)
```

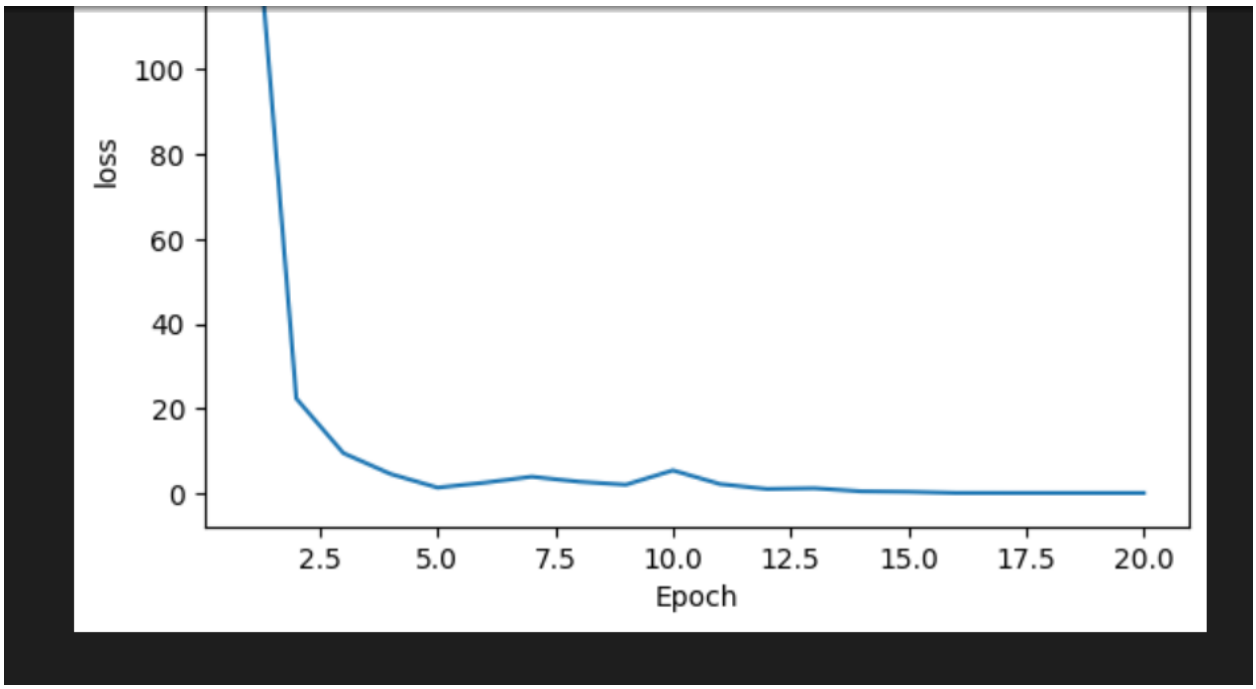
34] ✓ 0.1s

```
Accuracy:  0.4637824965270887
```

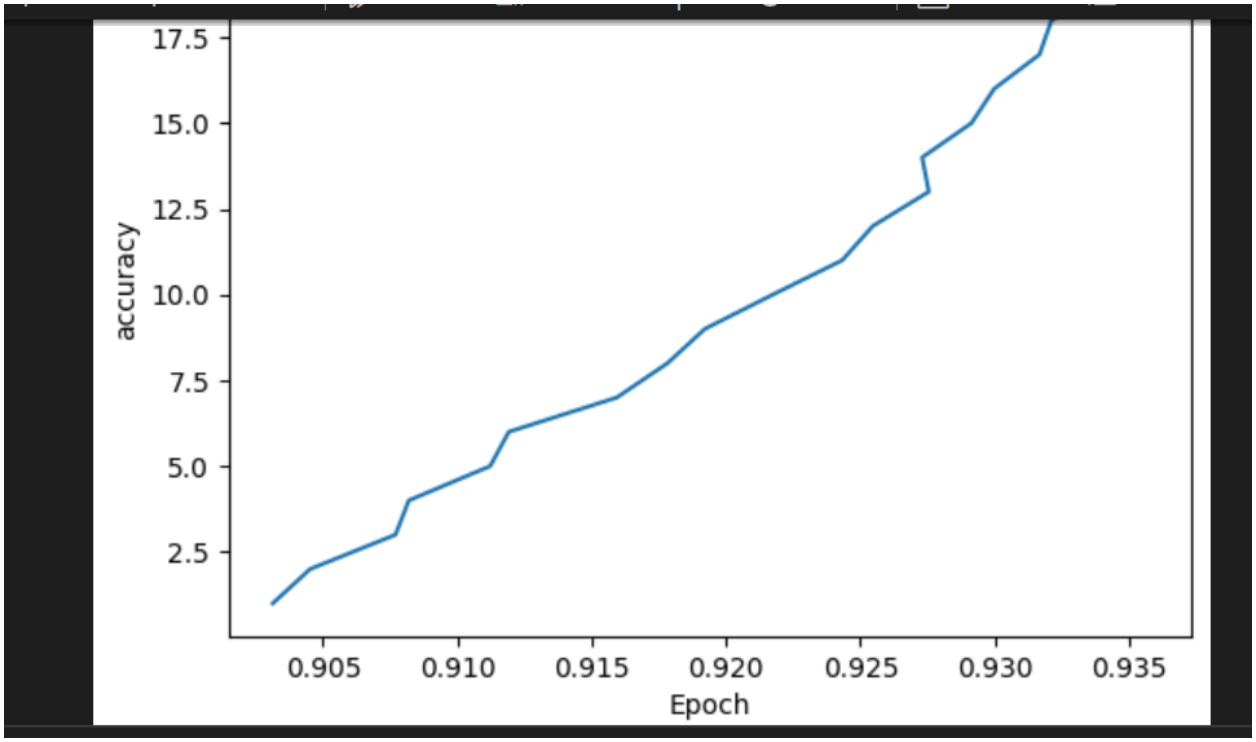
Gaussian and One-vsREst classifier accuracy NSL-KDD

```
315/315 [==============================] - 2s 6ms/step - lo
Epoch 13/20
...
Epoch 20/20
315/315 [==============================] - 2s 6ms/step - lo
158/158 [==============================] - 1s 4ms/step - lo
0.961301863193512
```

Single layer LSTM accuracy



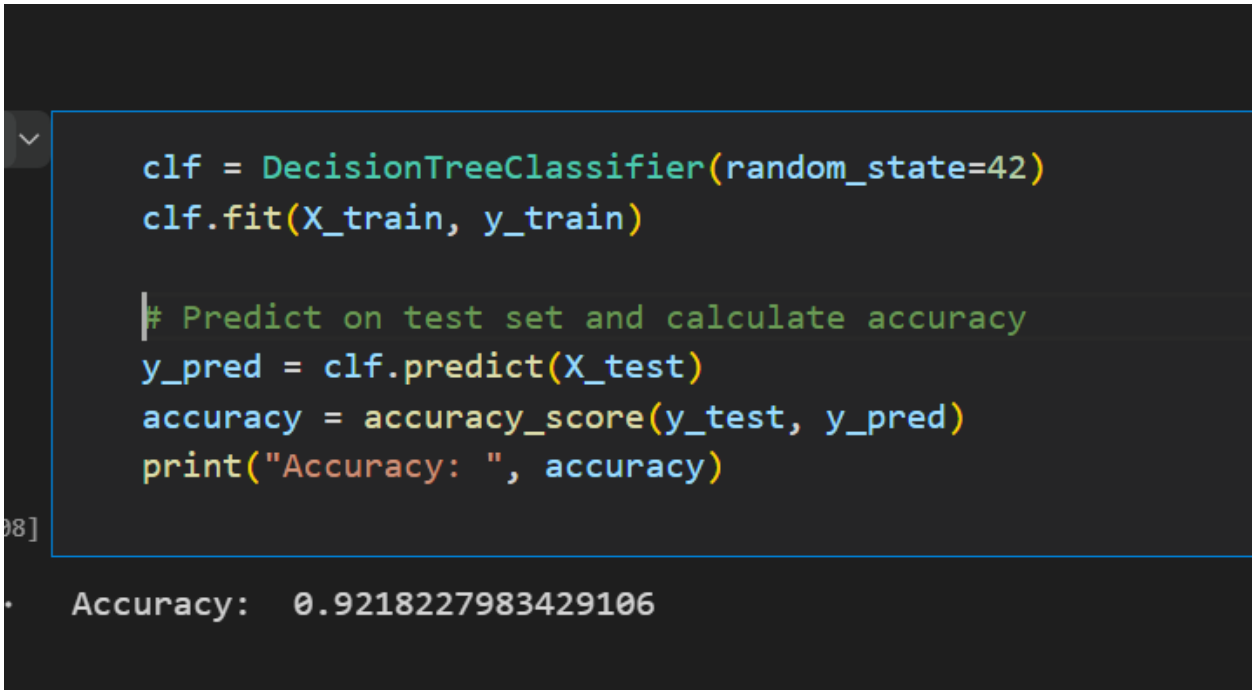
Single layer loss- epoch graph



Accuracy vs epoch graph

```
Epoch 12/20
315/315 [==============================] - 6s 19ms/step - loss: 0.1285 - accura
Epoch 13/20
...
Epoch 20/20
315/315 [==============================] - 2s 8ms/step - loss: 0.0246 - accurac
158/158 [==============================] - 3s 6ms/step - loss: 0.0126 - accurac
0.9680492281913757
```

Double LSTM layer accuracy



UNR -IDD Accuracy for Binary anomaly classification