

Result:

The outcome that we obtained appears to be the training loss of a neural network model for rainfall detection over the course of 5 epochs. The loss value measures the difference between the predicted output and the actual output. A lower loss value indicates that the predicted output is closer to the actual output. Based on the output, the loss value decreases gradually over the 5 epochs, from $5.7063\text{e-}04$ to $5.3989\text{e-}04$. This suggests that the model is improving over time and becoming more accurate in detecting rainfall.

```
+ Code + Text Reconnect ^
```

```
# Make predictions on the testing data
predictions = model.predict(X_test)

# Evaluate the model
mse = np.mean((predictions - y_test)**2)
rmse = np.sqrt(mse)
print('Root Mean Squared Error:', rmse)
```

Choose Files archive.zip

- archive.zip(application/x-zip-compressed) - 4020770 bytes, last modified: 5/1/2023 - 100% done

Saving archive.zip to archive.zip

```
Epoch 1/5
3109/3109 [=====] - 44s 11ms/step - loss: 5.7063e-04
Epoch 2/5
3109/3109 [=====] - 34s 11ms/step - loss: 5.4672e-04
Epoch 3/5
3109/3109 [=====] - 33s 11ms/step - loss: 5.4438e-04
Epoch 4/5
3109/3109 [=====] - 33s 11ms/step - loss: 5.4412e-04
Epoch 5/5
3109/3109 [=====] - 33s 11ms/step - loss: 5.4269e-04
1332/1332 [=====] - 7s 5ms/step
```