Final Term (Assignment – 1)

Build a CNN model using tensorflow sequential API to classify CIFAR-10 dataset. You have the freedom to generate any architecture you like. The objective is to gain max accuracy with min loss. Your model should not have any overfitting.

Once you have build a basic model then try the following and describe the results in your own words.

1. Try applying three different optimizers (SGD, ADAM, RMSPROP). You also need to show different affects of these optimizers with different parameters like – momentum.
2. Demonstrate the effect of using regularizes (L1/L2) in Conv2D layer.
3. Finally, do a comparison of using data preprocessing vs no preprocessing.

\*\* Submission is due on Tuesday (1st August, 2023)