ReadMe for TASK 1

As mentioned in the problem statement, I have trained a tensorflow lite LSTM model which takes an input as given in the data.csv file and the output is a vector of 50 values as desired.

The output is saved as an “output.csv” file in the Downloads folder of mobile storage.

I have only used the 5th and 6th columns as input to the LSTM model as specified. The data file and the LSTM model are saved as Android studio assets, hence are not required to be downloaded separately.

Directory Structure

Model.tflite - the tensorflow lite model initialized in python
Task1 - a folder containing the Android development code
Task1.apk - an APK file ready to be installed in android
Tflite.ipynb - an interactive Python notebook initializing the LSTM

Instructions

- Install Task1.apk on your Android smartphone
- This app is designed for Android 9 or more but only has been tested on Android 11
- The data and model files are already added as assets
- Allow storage permission to save the output file
- Click on the predict button to read the data file and run model to give output
- The output is saved in the Downloads folder as a “output.csv” file