

DL/ML Summer Training - Coding Test

Total Marks: 15

Exp. time of completion: 1 hr (12 PM to 1 PM)

Instructions: 1. You have to do this test on Google Colab or Jupyter with all libraries pre-installed.
2. You have to submit the python notebook file on Github as specified and show it to the supervisor before leaving the exam hall (the PR in GitHub). It will be merged only when you have shown your submission.
3. Don't use any hard code submissions.

Q1. Take this dataset for bank customer churn prediction:

<https://www.kaggle.com/barelydedicated/bank-customer-churn-modeling>

- 1) Build a deep learning model to predict the churn rate at the bank.
- 2) Once the model is built, print a classification report and analyze precision, recall and f1-score

Q2. Use Keras mnist dataset from

https://keras.io/api/datasets/fashion_mnist/

Build a neural network. Figure out,

1. Optimal number of hidden layers and neurons in each hidden layer that can give you the best accuracy
2. Optional accuracy score