

Shoolini University Lab Exam-I
Course name: Deep Learning (CSU675)

The dataset is provided in the repo you can download it from the repo.

(Exam duration 2 hours)

Q1. Create a neural network-based rain prediction method to predict whether there will be rain or not on an upcoming day in the event of the new data provided to the network. The dataset being weather.csv.

Create a .ipynb file and upload it. Also, follow these steps-

1. Load the dataset with pandas
2. Write whether this problem is a classification task? If yes then why? And if No then why?
3. Visualize the dataset and encode the data if necessary.
4. Create a neural network architecture with at least one hidden layer (based on your model performance).
5. Train the model with the given dataset with 80% train size and 20% test size.
6. Test the network.
7. Fed new input onto the network to predict the output.

Q2. Create a network to determine housing prices with multivariate features given to you. The dataset being housing.csv. Follow these steps-

1. Load the dataset
2. Write whether this problem is a classification task? If yes then why? And if No then why?
3. Replace the strings with encoding the data.
4. Create a network
5. Train the model with 75% train and 25% test data
6. Test the model with 25% test data.
7. Fed new inputs to predict the price.