**Solution Sheet**

1. Which model have you used for probability prediction? Explain your model.

I have used a simple feed forward ANN to predict the probabilities. The network has input layer with 24 nodes. A hidden layer with 24 nodes and two hidden layers with 20 nodes each. The output layer predicts probability.

Preprocessing the dataset involved using LabelEncoder of sklearn for the string data. Once encoding is done, normalization of data is done by dividing each value by the max of the column in which they belong to.

1. Which model have you used for Diuresis Time series prediction? Explain your model.

LSTM RNN is used to predict the time series. Data is split in preprocessing to a time intervals of 3 days with the fourth day as output.

Eg. 10,20,30,40,50

After preprocessing, it would become

10,20,30 -> 40

20,30,40 -> 50

30,40,50 -> ?

This form of dataset is fed into the RNN with input layer being a LSTM layer with 256 nodes

The ouput layer predicts the next value.