**Deep and Reinforcement Learning PP1**

Problem – 1

1. Question - 1
   1. The function *train\_valid\_split* splits the rawdata and labels into raw\_train, raw\_valid, label\_train, and label\_valid using a split\_index. Here rawdata, labels and split\_index are passed to the function where rawdata and labels are lists. For all data set we know labels for train and valid. So we train the model using training data and validate it using the valid data set.
   2. No, the testing set is taken to evaluate the model by checking how the parameters and features are trained. The main goal of test set is to check how the model performs on new or unseen data.
   3. code/DataReader.py (prepare\_X function)
   4. Bias is added to the function to shift the activation function, and bias acts as a linear function in the neural network, which can help the line to transpose using the constant value.
   5. code/DataReader.py
   6. code/DataReader.py
2. Question – 2
   1. code/LogisticRegression.py
   2. code/LogisticRegression.py
   3. code/LogisticRegression.py
   4. code/LogisticRegression.py
   5. code/LogisticRegression.py