Lab Assignment 5

1. Multiclass Logistic Regression: Implement Multiclass Logistic Regression (step-by step) on Iris dataset using one vs. rest strategy?

2. Use the weather dataset to implement the decision tree. Try different available parameters of the inbuilt method.

3. Download the Bank Note Authentication Dataset from the following link https://drive.google.com/file/d/12r4j7yjGC4s_TigKEHyISSY1NSPzF3eX/view?usp=sharing

   The dataset contains following four input features computed from 400X400 images of bank notes:

   1. variance of Wavelet Transformed image (continuous)

   2. skewness of Wavelet Transformed image (continuous)

   3. Curtosis of Wavelet Transformed image (continuous)

   4. entropy of image (continuous)

   Each instance is labelled as fake (label 0) or authentic (label 1).

   For the given dataset, implement Decision Tree-based CART algorithm