## (Based on Decision Tree Classifier)

Q1: Download the Bank Note Authentication Dataset from the following link

<u>Banknote-Authentication-UCI-Dataset/bank\_notes.csv</u> at master · AbhiRoy96/Banknote-Authentication-UCI-Dataset · GitHub

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:

- (i) Step-by-Step/Inbuilt Function
- (ii) Evaluate the performance of the classifier.