All the codes need to be built from scratch. Do not use the pre-defined libraries in sklearn.

1. Take the Iris dataset that you used in the Assignment 5. Implement Macro, Micro, Weighted F1-scores on this dataset based on the models developed in Assignment 5.
2. Take different thresholds (take thresholds starting from 0 to 1) on the predictions you got from the models that you developed for Assignment 5 and create an ROC curve for it. Find the Area Under Curve (AUC) for the ROC curve.
3. Using the normal equations, find the target values for the linear regression model on the Iris dataset. Compute the Mean Absolute Error (MAE), Mean Squared Error (MSE), and the R^2 error.