1. Download the dataset from https://www.kaggle.com/datasets/uciml/iris. Create a linear regression model to predict the categories. Create training, validation, and test splits in the dataset taking 80:10:10 and 70:15:15 proportions.
2. Use oversampling techniques to balance the dataset for each category. Create a linear regression model on this oversampled dataset. Do the experiment for each of the categories and create classifiers. Compare their performance.
3. Use SMOTE technique to create synthetic examples. Create a linear regression model on this oversampled dataset. Do the experiment for each of the categories and create classifiers. Compare their performance. Use two settings for SMOTE.
   a. Take any 2 samples from the minority class and generate the new synthetic points.
   b. Find the nearest sample for any sample and then apply the SMOTE technique.