**ASSIGNMENT-12: XGBoost**

1. **Connecting to the google drive**: This segment of the code connects to the Google Drive to access a file. The code imports the "drive" module from the "google.colab" library and calls the "mount()" function to link the Google Drive to access the file.
2. **Importing the libraries**: This segment of the code imports the required modules for machine learning, including numpy, pandas, and matplotlib. It also uninstalls the existing version of xgboost and installs version 0.90.
3. **Importing the dataset (Data Preprocessing)**: This segment of the code imports the dataset from the file in the Google Drive using pandas. It then separates the dataset into two parts, x and y. x contains all the columns except the last column, while y contains only the last column. Finally, it prints the values of x and y.
4. **Splitting the data into Training and test (Data Processing)**: This segment of the code splits the data into training and testing sets using the "train\_test\_split" function from the "sklearn.model\_selection" module. It splits the data into a 80-20 ratio for training and testing, respectively. Finally, it prints the training and testing sets.
5. **Training the model**: This segment of the code trains the XGBoost classifier on the training data using the "fit" function of the XGBClassifier.
6. **Making the confusion matrix**: This segment of the code uses the trained classifier to predict the test data using the "predict" function of the XGBClassifier. It then calculates the confusion matrix and accuracy score using the "confusion\_matrix" and "accuracy\_score" functions from the "sklearn.metrics" module.
7. **Applying K-fold Cross Validation**: This segment of the code applies K-fold cross-validation on the training data using the "cross\_val\_score" function from the "sklearn.model\_selection" module. It uses the trained classifier to predict the data for each fold and calculates the accuracy scores. Finally, it prints the mean and standard deviation of the accuracy scores.