## **Model Building**

## **Decision Tree Model**

Date	4 september 2022
Team Id	PNT2022TMID46202
Project Name	Smart Lender- Applicant Credibility Prediction for Loan Approval

A function named decision tree is created and train and test data are passed as the parameters. Inside the function, the DecisionTreeClassifier algorithm is initialized and training data is passed to the model with .fit() function

Test data is predicted with the .predict() function and saved in the new variable. For evaluating the model, a confusion matrix and classification report are done.

```
def decisionTree(x_train, x_test, y_train, y_test)
   dt=DecisionTreeClassifier()
   dt.fit(x_train,y_train)
   yPred = dt.predict(x_test)
   print('***DecisionTreeClassifier***')
   print('Confusion matrix')
   print(confusion_matrix(y_test,yPred))
   print('Classification_report')
   print(classification_report(y_test,yPred))
```