Practical 6 Ada Boost Ensemble Learning

# Load libraries  
from sklearn.ensemble import AdaBoostClassifier  
from sklearn import datasets  
# Import train\_test\_split function  
from sklearn.model\_selection import train\_test\_split  
#Import scikit-learn metrics module for accuracy calculation  
from sklearn import metrics

from sklearn.datasets import load\_breast\_cancer  
dataset = load\_breast\_cancer()

X = dataset.data  
y = dataset.target

# Split dataset into training set and test set  
X\_train, X\_test, y\_train, y\_test = train\_test\_split(X, y, test\_size=0.3) # 70% training and 30% test

# Create adaboost classifer object  
abc = AdaBoostClassifier(n\_estimators=50,  
 learning\_rate=1)  
# Train Adaboost Classifer  
model = abc.fit(X\_train, y\_train)  
  
#Predict the response for test dataset  
y\_pred = model.predict(X\_test)

# Model Accuracy, how often is the classifier correct?  
print("Accuracy:",metrics.accuracy\_score(y\_test, y\_pred))

Accuracy: 0.9532163742690059