#RANDOM FOREST ALGORITHM

from sklearn.ensemble import RandomForestClassifier

from sklearn.linear\_model import LogisticRegression

from sklearn.naive\_bayes import GaussianNB

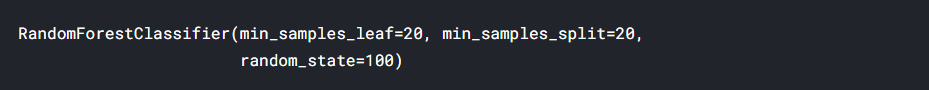
from sklearn.svm import LinearSVC

raf=RandomForestClassifier(min\_samples\_leaf=20, min\_samples\_split=20,random\_state=100)

raf= raf.fit(X\_train , y\_train)

raf

OUTPUT -



#Accuracy

y\_pred1 = raf.predict(X\_test)

rf=raf.score(X\_test, y\_test)

print('Accuracy score= {:.2f}'.format(raf.score(X\_test, y\_test)))



#Confusion Matrix

from sklearn.metrics import classification\_report, confusion\_matrix

from mlxtend.plotting import plot\_confusion\_matrix

print('\n')

print("confusion matrix")

print('\n')

CR=confusion\_matrix(y\_test, y\_pred1)

print(CR)

print('\n')

fig, ax = plot\_confusion\_matrix(conf\_mat=CR,figsize=(10, 10),

show\_absolute=True,

show\_normed=True,

colorbar=True)

plt.show()

