Logistic Regression for Parkinsons:

#Data Pre-procesing Step

# importing libraries

import numpy as nm

import pandas as pd

#importing datasets

data\_set= pd.read\_csv('parkinsons.data.csv')

#Extracting Independent and dependent Variable

x= data\_set.drop(['status','name'] , axis =1)

y= data\_set['status']

# Splitting the dataset into training and test set.

from sklearn.model\_selection import train\_test\_split

x\_train, x\_test, y\_train, y\_test= train\_test\_split(x, y, test\_size= 0.25, random\_state=0)

#feature Scaling

from sklearn.preprocessing import StandardScaler

st\_x= StandardScaler()

x\_train= st\_x.fit\_transform(x\_train)

x\_test= st\_x.transform(x\_test)

#Fitting Logistic Regression to the training set

from sklearn.linear\_model import LogisticRegression

classifier= LogisticRegression(random\_state=0)

classifier.fit(x\_train, y\_train)

LogisticRegression(C=1.0, class\_weight=None, dual=False, fit\_intercept=True,

                   intercept\_scaling=1, l1\_ratio=None, max\_iter=100,

                   multi\_class='warn', n\_jobs=None, penalty='l2',

                   random\_state=0, solver='warn', tol=0.0001, verbose=0,

                   warm\_start=False)

#Predicting the test set result

y\_pred= classifier.predict(x\_test)

#Creating the Confusion matrix

from sklearn.metrics import confusion\_matrix

cm= confusion\_matrix(y\_test, y\_pred)

from sklearn import metrics

print(metrics.classification\_report(y\_test, y\_pred))