Linear Regression using ML

import pandas as pd

import numpy as np

import matplotlib.pyplot as plt

from sklearn import metrics

from sklearn.linear\_model import LinearRegression

from sklearn.cross\_validation import train\_test\_split

data= pd.read\_csv(r"C:\Users\kumars262\Desktop\DS\DataSets\headbrain.csv")

X=data["Head Size(cm^3)"].values.reshape(-1,1)

Y=data["Brain Weight(grams)"].values.reshape(-1,1)

X\_train, X\_test, Y\_train, Y\_test = train\_test\_split(X,Y, random\_state = 1)

linearregression = LinearRegression()

linearregression.fit(X\_train, Y\_train)

Y\_pred = linearregression.predict(X\_test)

plt.scatter(X\_test, Y\_test)

plt.plot(X\_test, Y\_pred, 'go-')

plt.show()

print("Root Mean Square is ", np.sqrt(metrics.mean\_squared\_error(Y\_test, Y\_pred)))

