**AML Algorithm #4 : Predict CO2 emission of a car using Multiple Linear Regression**

import pandas

from sklearn import linear\_model

df = pandas.read\_csv("data.csv")

X = df[['Weight', 'Volume']]

y = df['CO2']

regr = linear\_model.LinearRegression()

regr.fit(X, y)

a = int(input("Enter Weight : "))

b = int(input("Enter Volume : "))

predictedCO2 = regr.predict([[a, b]])

print("\nWeight = ",a, "Volume = ",b, "\nCO2 Emission = ",predictedCO2)

Z = df[['Weight', 'Volume', 'Year']]

y = df['CO2']

regr = linear\_model.LinearRegression()

regr.fit(Z, y)

a = int(input("Enter Weight : "))

b = int(input("Enter Volume : "))

c = int(input("Enter Mfg Year : "))

predictedCO2 = regr.predict([[a, b, c]])

print("\nWeight = ",a, "Volume = ",b, "Mfg Year = ",c, "\nCO2 Emission = ",predictedCO2)

**Output :**

Enter Weight : 2455

Enter Volume : 1255

Weight = 2455 Volume = 1255

CO2 Emission = [108.02789304]

Enter Weight : 2400

Enter Volume : 1400

Enter Mfg Year : 2008

Weight = 2400 Volume = 1400 Mfg Year = 2008

CO2 Emission = [108.04127561]