#step-5 :Running Actual Program(SLR)

import numpy as np

import matplotlib.pyplot as plt

import pandas as pd

#Load dataset

dataset=pd.read\_csv("F:\hw.csv")

# To display dataset

print(dataset)

x=dataset.iloc[:,:-1].values

X=dataset.iloc[:,:-1].values

y=dataset.iloc[:,1].values

print(X)

print(y)

#from sklearn subpackage import linear regression model

from sklearn.linear\_model import LinearRegression

regressor=LinearRegression()

regressor.fit(X,y)

#To get the slop

regressor.coef\_

#To get the y intercept

regressor.intercept\_

#To print the equation of line

print("y= "+ str(regressor.coef\_) + "X + " + str(regressor.intercept\_))

#To get the slop

print("Accuracy:",regressor.score(X,y)\*100)

#To plot graph

plt.plot(X,y,'o')

plt.plot(X,regressor.predict(X));

plt.show()

predict\_x=int(input('Enter Height:'))

predict\_y=(0.67461045\*predict\_x)-38.45508707607698

plt.scatter(X,y)

plt.scatter(predict\_x,predict\_y)

plt.xlabel('Enter Height:(Predicted\_x)')

plt.ylabel('Enter Weight:(Predicted\_y)')

#plotting the Predicted regression line

plt.plot(X,regressor.predict(X),color='green');

plt.show()