<https://www.youtube.com/watch?v=SSmpyoIdJTc>

Import libraries

Linear equation y = mx +b(m = coefff b= intercept)

Poly equation y = b + b1x1+b2x2 +b3xn

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

From sklearn.preprossing import PolynomialFeatures

From sklearn.linear\_model import LinearRegression()

Import matplotlib.pyplot as plt

X\_train,X\_test,y\_train,y\_test = train\_test\_split(df[‘ab’],df[‘de’])

Poly = PolynomialFeatures( degree= 3)

X\_train\_poly,x\_test\_poly = poly.fit\_transform(X\_train), poly.fit\_transform(X\_test),

Model = linear\_model.LinearRegression()

Model = model.fit(X\_train\_poly,y\_train)

Coefficient = Model.coef\_

Intercept = Model.intercept\_

response = intercept + coefficient[1] \*x\_axis + coefficient[2]\*x\_axis\*\*2(linear regression curve equation)

x\_axis = np.linspace(1,10,100)

Plt.scatter(df[‘ab’],df[‘de’])

Plt.plot(x\_axis,response)

Plt.show()