**# To predict the price of any item using supervised learning algorithm.**

**# (Linear Regression)**

import pandas as pd

import numpy as np

import matplotlib.pyplot as plt

from sklearn.linear\_model import LinearRegression

**#Load the Dataset**

df=pd.read\_csv("/content/PotatoPrice.csv")

print(df)

**#DATA VISUALIZATION**

%matplotlib inline

plt.xlabel("Potato in Kg")

plt.ylabel("Price in Rupees")

plt.scatter(df.potato\_kg,df.price)

X=df[["potato\_kg"]]

Y=df["price"]

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

X\_train,X\_test,Y\_train,Y\_test=train\_test\_split(X,Y,test\_size=0.2)

print("X\_train", X\_train)

print("X\_test", X\_test)

print("Y\_train", Y\_train)

print("Y\_test", Y\_test)

**#Train Dataset using model**

reg=LinearRegression()

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

reg.predict(X\_test)

**#ACCURACY OF THE MODEL**

print('ACCURACY:', reg.score(x\_test,y\_test))

**#Take the user input**

x=input("Enter the potato quantity in kg: \n")

array=np.array(x)

fvalu=array.astype(np.float)

fvalu\_2D=([[fvalu]])

my\_prediction=reg.predict(fvalu\_2D)

price=np.array(my\_prediction)

price=price.item()

print('So',x,'Kilogram potato price is ',price,' Rupees')

**Output:**

Trained Dataset: [0.17857143 129.82142857]

ACCURACY: 0.9681122448979591

Enter the potato quantity in kg: 10

So 10 Kilogram potato price is 124.99999999999999 Rupees

