* SPYDER Digital marketing Linear aggressor \*

import numpy as np

import pandas as pd

import matplotlib.pyplot as plt

dataset = pd.read\_csv(r"D:\Samsom - All Data\Naresh IT Institute\New folder\Investment.csv")

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

y = dataset.iloc[:, 4]

x = pd.get\_dummies(x,dtype=int)

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, random\_state = 0)

from sklearn.linear\_model import LinearRegression

regressor = LinearRegression()

regressor.fit(x\_train,y\_train)

y\_pred = regressor.predict(x\_test)

bias = regressor.score(x\_train, y\_train)

print(bias)

variance = regressor.score(x\_test,y\_test)

print(variance)

intercept = regressor.intercept\_

print(intercept)

x = np.append(arr = np.ones((50,1)).astype(int), values = x, axis = 1)

import statsmodels.api as sm

x\_opt = x[:,[0,1,2,3,4,5]]

#ordinaryLeastSquares

regressor\_OLS = sm.OLS(endog=y, exog=x\_opt).fit()

regressor\_OLS.summary()

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