- SPYDER Digital marketing Linear aggressor *

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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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