

SIMPLE LINEAR REGRESSION:

CODE:

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...sers\DELL\Downloads\Machine Learning Course\1 - Simple Linear Regression\simple_linear_regression.py
simple_linear_regression.py polynomial_regression.py
1 #SyedaBareehaAli
2
3 # Simple Linear Regression
4 # Importing the libraries
5 import numpy as np
6 import matplotlib.pyplot as plt
7 import pandas as pd
8
9 # Importing the dataset
10 dataset = pd.read_csv('C:\Users\DELL\Downloads\Assignemnt-2-batch-3-mas
11 X = dataset.iloc[:,2:3].values
12 y = dataset.iloc[:,3].values
13
14 # Splitting the dataset into the Training set and Test set
15 from sklearn.model_selection import train_test_split
16 X_train, X_test, y_train, y_test = train_test_split(X, y, test_size = 1/3,
17
18 # Fitting Simple Linear Regression to the Training set
19 from sklearn.linear_model import LinearRegression
20 regressor = LinearRegression()
21 regressor.fit(X_train, y_train)
22
23 # Predicting the Test set results
24 y_pred = regressor.predict(X_test)
25
26 # Visualising the Training set results
27 plt.scatter(X_train, y_train, color = 'purple')
28 plt.plot(X_train, regressor.predict(X_train), color = 'orange')
29 plt.title('Head Size VS Brain weight(Training set)')
30 plt.xlabel('Head size in cm³')
31 plt.ylabel('Brain weight in g')
32 plt.show()
33
34 # Visualising the Test set results
35 plt.scatter(X_test, y_test, color = 'purple')
36 plt.plot(X_train, regressor.predict(X_train), color = 'orange')
37 plt.title('Head Size VS Brain weight(Test set)')
38 plt.xlabel('Head size in cm³')
39 plt.ylabel('Brain weight in gm')
40 plt.show()
```

OUTPUTS:

