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| # Simple Linear Regression |
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|  | # Importing the libraries |
|  | import numpy as np |
|  | import matplotlib.pyplot as plt |
|  | import pandas as pd |
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|  | # Importing the dataset |
|  | dataset = pd.read\_csv('Salary\_Data.csv') |
|  | X = dataset.iloc[:, :-1].values |
|  | y = dataset.iloc[:, 1].values |
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|  | # Splitting the dataset into the Training set and Test set |
|  | from sklearn.model\_selection import train\_test\_split |
|  | X\_train, X\_test, y\_train, y\_test = train\_test\_split(X, y, test\_size = 1/3, random\_state = 0) |
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|  | # Feature Scaling |
|  | """from sklearn.preprocessing import StandardScaler |
|  | sc\_X = StandardScaler() |
|  | X\_train = sc\_X.fit\_transform(X\_train) |
|  | X\_test = sc\_X.transform(X\_test) |
|  | sc\_y = StandardScaler() |
|  | y\_train = sc\_y.fit\_transform(y\_train)""" |
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|  | # Fitting Simple Linear Regression to the Training set |
|  | from sklearn.linear\_model import LinearRegression |
|  | regressor = LinearRegression() |
|  | regressor.fit(X\_train, y\_train) |
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|  | # Predicting the Test set results |
|  | y\_pred = regressor.predict(X\_test) |
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|  | # Visualising the Training set results |
|  | plt.scatter(X\_train, y\_train, color = 'red') |
|  | plt.plot(X\_train, regressor.predict(X\_train), color = 'blue') |
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|  | # Visualising the Test set results |
|  | plt.scatter(X\_test, y\_test, color = 'red') |
|  | plt.plot(X\_train, regressor.predict(X\_train), color = 'blue') |
|  | plt.title('Salary vs Experience (Test set)') |
|  | plt.xlabel('Years of Experience') |
|  | plt.ylabel('Salary') |
|  | plt.show() |