simple linear regression

# example code

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| # Simple Linear Regression  # Importing the libraries  import numpy as np  import matplotlib.pyplot as plt  import pandas as pd  # Importing the dataset  dataset = pd.read\_csv('../[1]data\_set/csv')  X = dataset.iloc[:, :-1].values  y = dataset.iloc[:, 1].values  # 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)  # Fitting Simple Linear Regression to the Training set  from sklearn.linear\_model import LinearRegression  regressor = LinearRegression()  regressor.fit(X\_train, y\_train)  # Predicting the Test set results  y\_pred = regressor.predict(X\_test)  # Visualising the Training set results  plt.scatter(X\_train, y\_train, color = 'black')  plt.plot(X\_train, regressor.predict(X\_train), color = 'blue')  # 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()  # validation with r2\_score  from sklearn.metrics import r2\_score  r2\_score(y\_pred, y\_test) |

# testing result

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| 0.9716987073632184 |