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In [ ]: #import libraries
import numpy as np
import pandas as pd

#import dataset
dataset = pd.read_csv('datasets/studentscores.csv')
X = dataset.iloc[ : , :1].values
Y = dataset.iloc[ : , 1].values

#check for missing data
from sklearn.impute import SimpleImputer

imputer = SimpleImputer(missing_values=np.nan, strategy='mean')
imputer = imputer.fit(X)
X = imputer.transform(X)

#split dataset
from sklearn.model_selection import train_test_split
X_train, X_test, Y_train, Y_test = train_test_split(X, Y, test_size=1/4, random_stat
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In [ ]: #fit regressor
from sklearn.linear_model import LinearRegression
regressor = LinearRegression()
regressor = regressor.fit(X_train, Y_train)
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In [ ]: #predict result
Y_pred = regressor.predict(X_test)
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In [ ]: import matplotlib.pyplot as plt

#visualise results
fig, (ax1, ax2) = plt.subplots(1, 2)
#training
ax1.title.set_text('Training Results')
ax1.scatter(X_train, Y_train, color = 'red')
ax1.plot(X_train, regressor.predict(X_train), color = 'blue')
#testing
ax2.title.set_text('Testing Results')
ax2.scatter(X_test, Y_test, color = 'red')
ax2.plot(X_test, regressor.predict(X_test), color = 'blue')
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Out[ ]: [<matplotlib.lines.Line2D at 0x16a21749220>]
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