linearreg_towardsds

January 27, 2022

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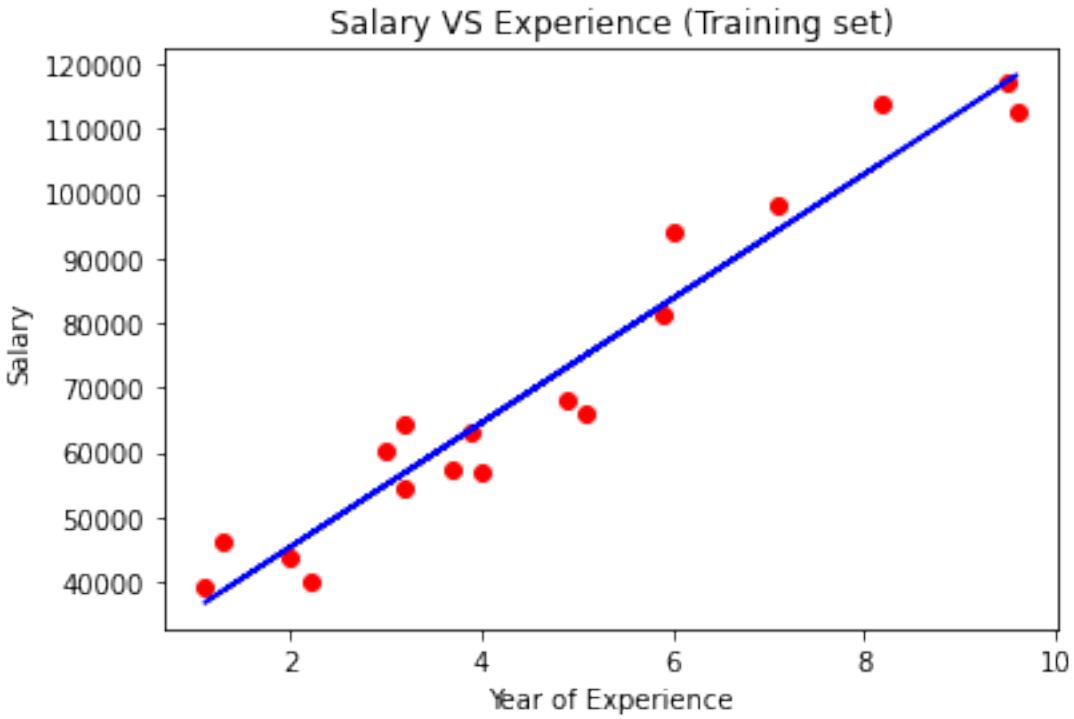
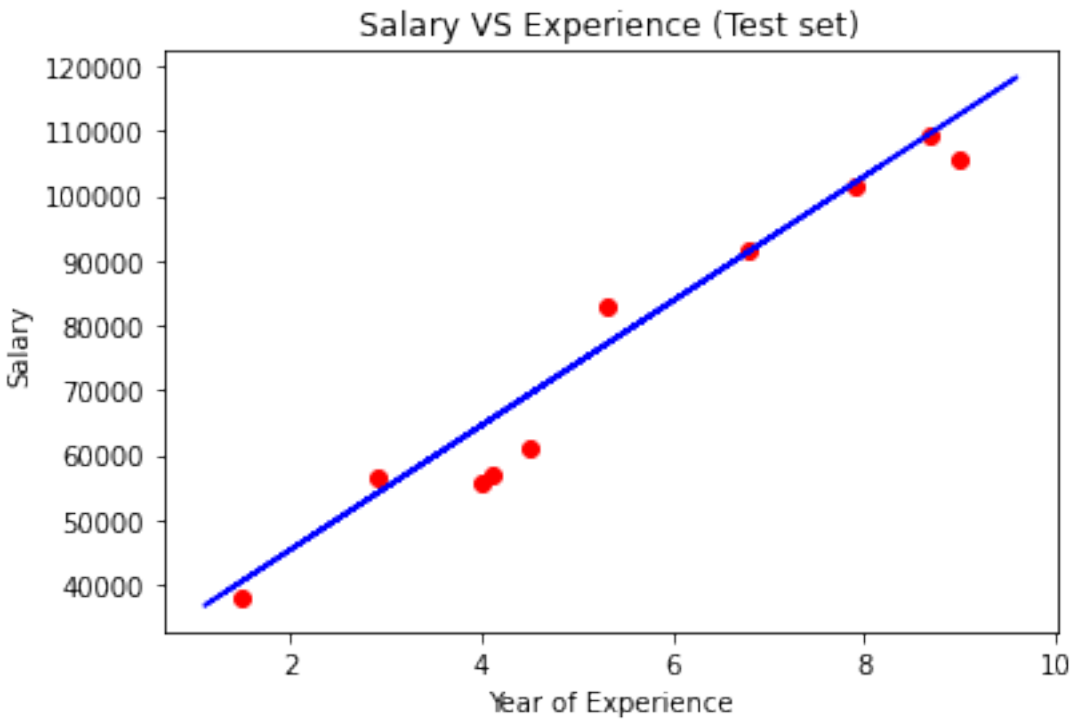
```
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd

# Importing the dataset
#dataset = pd.read_csv('181105_missing-data.csv')
dataset = pd.read_csv('salary_data.csv')
dataset =dataset.dropna()
X = dataset.iloc[:, :-1].values #get a copy of dataset exclude last column
y = dataset.iloc[:, 1].values #get array of dataset in column 1st

#print(X)
# 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)

"""
# Scaling
from sklearn.preprocessing import StandardScaler
sc_X = StandardScaler()
X_train = sc_X.fit_transform(X_train)
X_test = sc_X.transform(X_test)
"""

# 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)

# Visualizing the Training set results
viz_train = plt
viz_train.scatter(X_train[:,0], y_train, color='red')
viz_train.plot(X_train[:,0], regressor.predict(X_train), color='blue')
```

```
viz_train.title('Salary VS Experience (Training set)')
viz_train.xlabel('Year of Experience')
viz_train.ylabel('Salary')
viz_train.show()

# Visualizing the Test set results
viz_test = plt
viz_test.scatter(X_test[:,0], y_test, color='red')
viz_test.plot(X_train[:,0], regressor.predict(X_train), color='blue')
viz_test.title('Salary VS Experience (Test set)')
viz_test.xlabel('Year of Experience')
viz_test.ylabel('Salary')
viz_test.show()
```




Salary VS Experience (Test set)
120000
110000
100000
90000
80000
70000
60000
50000
40000
Salary
2
4
6
8
10
Year of Experience

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