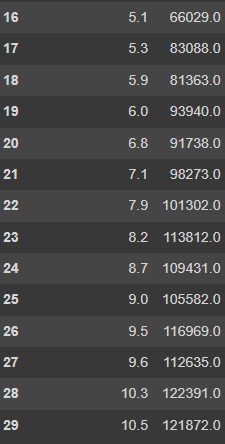
# Name: Yash Sasane Roll no: 681 PRN: 202201050052 Division: F(F4)

EDS Assignment 6:

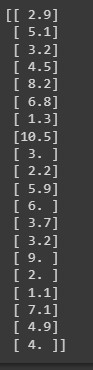
|  |
| --- |
| import numpy as nm |
| import matplotlib.pyplot as mtp |
| import pandas as pd |
| data\_set=pd.read\_csv('/content/sample\_data/Salary\_Data (1).xls') |
| data\_set |

Output:





|  |
| --- |
| x=data\_set.iloc[:,:-1].values |
| y=data\_set.iloc[:,1].values |
| #splitting the dataset into training 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) |
| print(x\_train) |



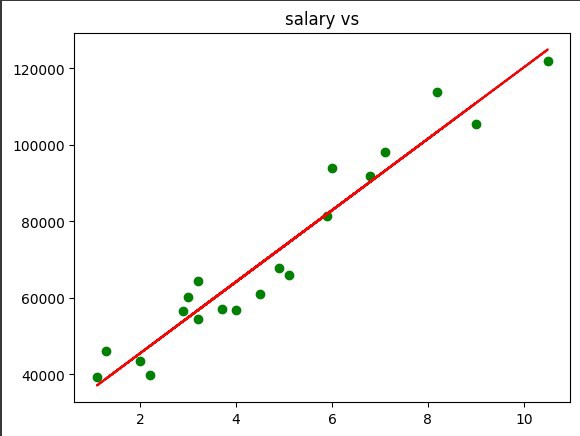
|  |
| --- |
| #fitting the simple linear regression model to the training dataset |
| from sklearn.linear\_model import LinearRegression |
| regressor=LinearRegression() |
| regressor.fit(x\_train, y\_train) |
|  |
|  |



|  |
| --- |
| #prediction of test and training set result |
| y\_pred= regressor.predict(x\_test) |
| x\_pred= regressor.predict(x\_train) |
| print(y\_pred) |



|  |
| --- |
| mtp.scatter(x\_train, y\_train, color="green") |
| mtp.plot(x\_train, x\_pred, color="red") |
| mtp.title("salary vs") |



|  |
| --- |
| mtp.scatter(x\_train, y\_train, color="green") |
| mtp.plot(x\_train, x\_pred, color="red") |
| mtp.title("Salary vs Experience(Training Dataset)") |
| mtp.xlabel("Years of Experience") |
| mtp.ylabel("Salary(In Rupees)") |
| mtp.show |



|  |
| --- |
| #visualising the test set result |
| mtp.scatter(x\_test, y\_test, color="blue") |
| mtp.plot(x\_train, x\_pred, color="red") |
| mtp.title("salary vs experience") |
| mtp.xlabel("years of experience") |
| mtp.ylabel("salary (in rupees)") |
| mtp.show() |

