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In [1]: import pandas as pd
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In [2]: dataset = pd.read_csv('Salary_Data.csv')
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```
In [3]: X = dataset.iloc[:, :-1].values  
y = dataset.iloc[:, 1].values
```

```
In [4]: 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)
```

```
In [5]: from sklearn.linear_model import LinearRegression  
regressor = LinearRegression()  
regressor.fit(X_train, y_train)
```

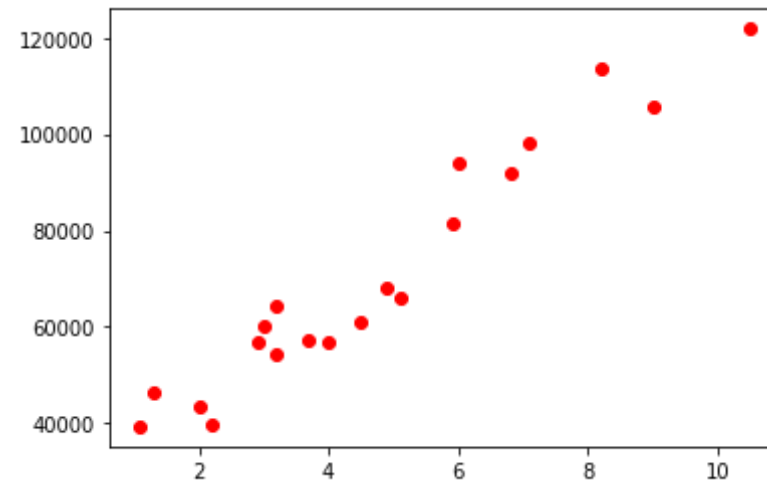
```
Out[5]: LinearRegression(copy_X=True, fit_intercept=True, n_jobs=None, normalize=False)
```

```
In [6]: y_pred = regressor.predict(X_test)
```

```
In [7]: import matplotlib.pyplot as plt
```

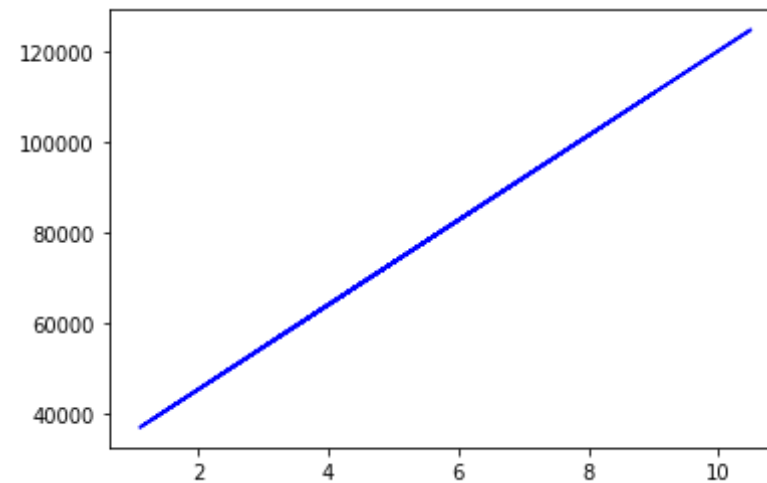
```
In [8]: plt.scatter(X_train, y_train, color = 'red')
```

```
Out[8]: <matplotlib.collections.PathCollection at 0x1e160b0ea20>
```



```
In [9]: plt.plot(X_train, regressor.predict(X_train), color='blue')
```

```
Out[9]: [<matplotlib.lines.Line2D at 0x1e160bbd6d8>]
```



```
In [10]: plt.title('Salary vs Experience (Training set)')
plt.xlabel('Years of Experience')
plt.ylabel('Salary')
plt.show()
```



```
In [12]: plt.plot(X_train, regressor.predict(X_train), color='blue')
plt.title('Salary vs Experience (Training set)')
plt.xlabel('Years of Experience')
plt.ylabel('Salary')
plt.show()
```



```
In [13]: import matplotlib.pyplot as plt
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()
```



```
In [14]: new_salary_pred = regressor.predict([[15]])  
print('The predicted salary of a person with 15 years experience is ', new_salary_pred)
```

The predicted salary of a person with 15 years experience is [167005.32889087]

```
In [ ]:
```