In [ ]:
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
```

Importing datset

Using pandas read the data in csv

In [ ]:
```
# making the X and Y variables for the plotting using the iloc function. iloc will select the colu
dataset = pd.read_csv("salary_data.csv")
X= dataset.iloc[:,: -1].values # .values is used to creat return the numpy representation of the D
Y=dataset.iloc[:,1].values
```

Splitting of the data

- Training
- Testing # For this we will sklearn library

In [ ]:
```
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)
```

Data has been Split Now

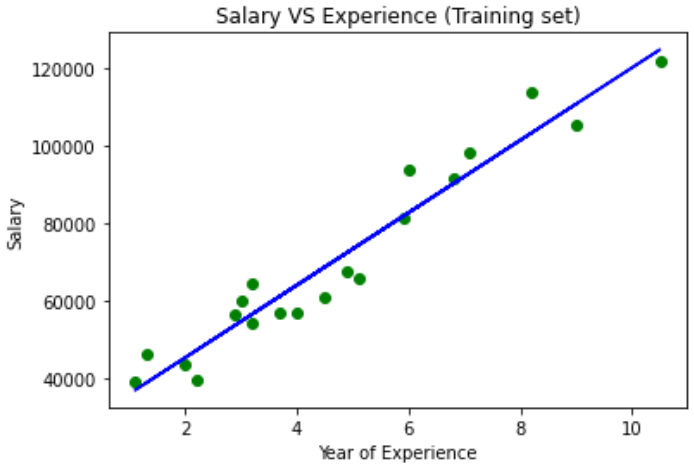
Regression model development

- Import the Linear regression model
- Create a variable and call the Linear regression model in it
- Fit the data in the Linear Regerssor model via its variable Regerssor

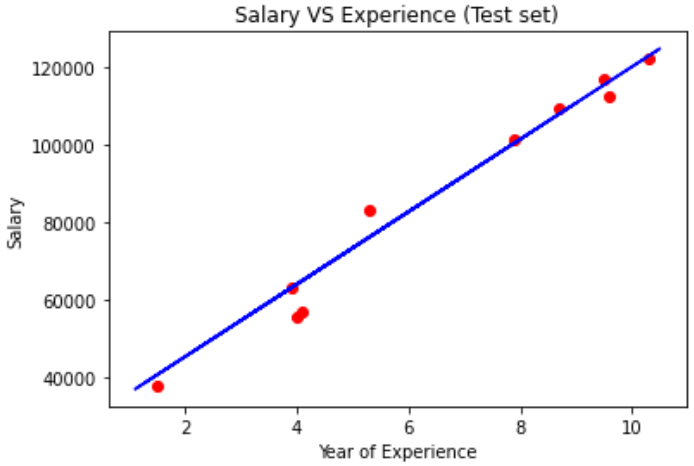
In [ ]:
```
# Data fitting
from sklearn.linear_model import LinearRegression
regressor= LinearRegression()
regressor.fit(X_train, y_train)
```

Out[ ]:
```
LinearRegression()
```

In [ ]:
```
# Now Visualizing the training set
plt.scatter(X_train,y_train,color="green")
plt.plot(X_train,regressor.predict(X_train),color="blue")# Means plot the predicted and and the X_
plt.title('Salary VS Experience (Training set)')
plt.xlabel('Year of Experience')
plt.ylabel('Salary')
plt.show()
```



In [ ]:
```
# Now Visualizing the testing set
plt.scatter(X_test,y_test,color="red")
plt.plot(X_train,regressor.predict(X_train),color="blue")# Means plot the predicted and and the X_
plt.title('Salary VS Experience (Test set)')
plt.xlabel('Year of Experience')
plt.ylabel('Salary')
plt.show()
```



In [ ]:
```
# Predicting the result of 5 Years Experience
# Predicting the Test set results
y_pred = regressor.predict([[5],[10]])
print(y_pred)
```

```
[ 73545.90445964 120275.61667525]
```

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

```
[ 73545.90445964 120275.61667525]
```