

```
import pandas as pd
import matplotlib.pyplot as plt
import numpy as np
data= pd.read_csv ("/content/drive/MyDrive/Colab Notebooks/Salary_Data.csv")
```

```
from google.colab import drive
drive.mount('/content/drive')
```

Mounted at /content/drive

```
x = data.iloc[:, :-1].values
y = data .iloc[:,1].values
print(data.iloc[:, :-1])
```

```
↳ YearsExperience
0      1.1
1      1.3
2      1.5
3      2.0
4      2.2
5      2.9
6      3.0
7      3.2
8      3.2
9      3.7
10     3.9
11     4.0
12     4.0
13     4.1
14     4.5
15     4.9
16     5.1
17     5.3
18     5.9
19     6.0
20     6.8
21     7.1
22     7.9
23     8.2
24     8.7
25     9.0
26     9.5
27     9.6
28    10.3
29    10.5
```

```
from sklearn.model_selection import train_test_split
x_train ,x_test ,y_train ,y_test= train_test_split(x,y,test_size=0.25,random_state=0)
```

```
from sklearn.preprocessing import StandardScaler
scaler = StandardScaler()
```

```
x_train = scaler.fit_transform(x_train)
x_test = scaler.fit_transform(x_test)
```

```
from sklearn.linear_model import LinearRegression
reg = LinearRegression()
reg.fit(x_train , y_train)
```

```
↳ LinearRegression
LinearRegression()
```

```
y_pre = reg.predict(x_train)
y_pre
# y_pred = rev
```

```
array([[ 76699.15692405, 101086.40420311,  54187.85174338,  74823.21482566,
        57001.76489096,  69195.38853049, 103900.31735069,  90768.72266197,
        39180.31495627, 125473.65148217,  55125.82279258,  47622.05439902,
        82326.98321922,  83264.95426841,  61691.62013694,  57001.76489096,
        111404.08574425,  45746.11230063,  37304.37285788,  93582.63580955,
        72947.27272727,  64505.53328452])
```

```
matplotlib.scatter(x_train, y_train , color = "green")  
matplotlib.plot(x_train , y_pre , color = "red")  
matplotlib.title("salary vs experience ")  
matplotlib.xlabel("yers of experience")  
matplotlib.ylabel(" salary of Rupees")  
matplotlib.show()
```

