





```
import numpy as np
import pandas as pd
from sklearn.model_selection import train_test_split
from sklearn.linear_model import LinearRegression
import matplotlib.pyplot as plt
```

```
# Replace 'path_to_your_dataset.csv' with the path to your actual dataset file
dataset = pd.read_csv('/content/salary_data.csv')
```

dataset



	YearsExperience	Age	Salary	
0	1.1	21.0	39343	
1	1.3	21.5	46205	
2	1.5	21.7	37731	
3	2.0	22.0	43525	
4	2.2	22.2	39891	
5	2.9	23.0	56642	
6	3.0	23.0	60150	
7	3.2	23.3	54445	
8	3.2	23.3	64445	
9	3.7	23.6	57189	
10	3.9	23.9	63218	
11	4.0	24.0	55794	
12	4.0	24.0	56957	
13	4.1	24.0	57081	
14	4.5	25.0	61111	
15	4.9	25.0	67938	
16	5.1	26.0	66029	
17	5.3	27.0	83088	
18	5.9	28.0	81363	
19	6.0	29.0	93940	
20	6.8	30.0	91738	
21	7.1	30.0	98273	
22	7.9	31.0	101302	
23	8.2	32.0	113812	
24	8.7	33.0	109431	
25	9.0	34.0	105582	
26	9.5	35.0	116969	
27	9.6	36.0	112635	
28	10.3	37.0	122391	
29	10.5	38.0	121872	

Next steps:

- Generate code with dataset
-  View recommended plots
- New interactive sheet

```
# Replace 'YearsExperience' and 'Salary' with the actual column names from your dataset
X = dataset[['YearsExperience']] # Independent variable(s)
y = dataset['Salary']           # Dependent variable
```

```
# Step 4: Splitting the dataset into the Training set and Test set
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random_state=0)
```

```
# Step 5: Fitting Simple Linear Regression to the Training set
regressor = LinearRegression()
regressor.fit(X_train, y_train)
```

```
LinearRegression()
LinearRegression()
```

```
# Step 6: Predicting the Test set results
y_pred = regressor.predict(X_test)
```

```
# Step 7: Visualizing the Training set results
plt.scatter(X_train, y_train, color='red') # Real data points
plt.plot(X_train, regressor.predict(X_train), color='blue') # Regression line
plt.title('Salary vs Experience (Training set)')
plt.xlabel('Years of Experience')
plt.ylabel('Salary')
plt.show()
```



