Data and information visualization

```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
```

Read Data Csv file

```
df=pd.read_csv("Salary_Data.csv")
df
```

	YearsExperience	Salary
0	1.1	39343.0
1	1.3	46205.0
2	1.5	37731.0
3	2.0	43525.0
4	2.2	39891.0
5	2.9	56642.0
6	3.0	60150.0
7	3.2	54445.0
8	3.2	64445.0
9	3.7	57189.0
10	3.9	63218.0
11	4.0	55794.0
12	4.0	56957.0
13	4.1	57081.0
14	4.5	61111.0
15	4.9	67938.0
16	5.1	66029.0
17	5.3	83088.0
18	5.9	81363.0
19	6.0	93940.0
20	6.8	91738.0
21	7.1	98273.0
22	7.9	101302.0
23	8.2	113812.0
24	8.7	109431.0
25	9.0	105582.0
26	9.5	116969.0
27	9.6	112635.0
28	10.3	122391.0
29	10.5	121872.0

Next steps: Generate code with df | View recommended plots | New interactive sheet

```
df.sort_values(by="YearsExperience")
df.head(10)
```

	YearsExperience	Salary
0	1.1	39343.0
1	1.3	46205.0
2	1.5	37731.0
3	2.0	43525.0
4	2.2	39891.0
5	2.9	56642.0
6	3.0	60150.0
7	3.2	54445.0
8	3.2	64445.0
9	3.7	57189.0

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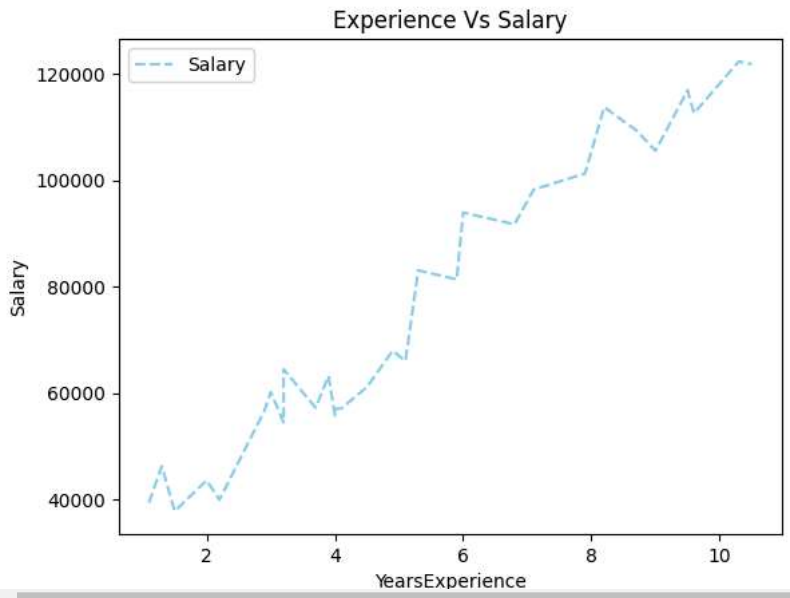
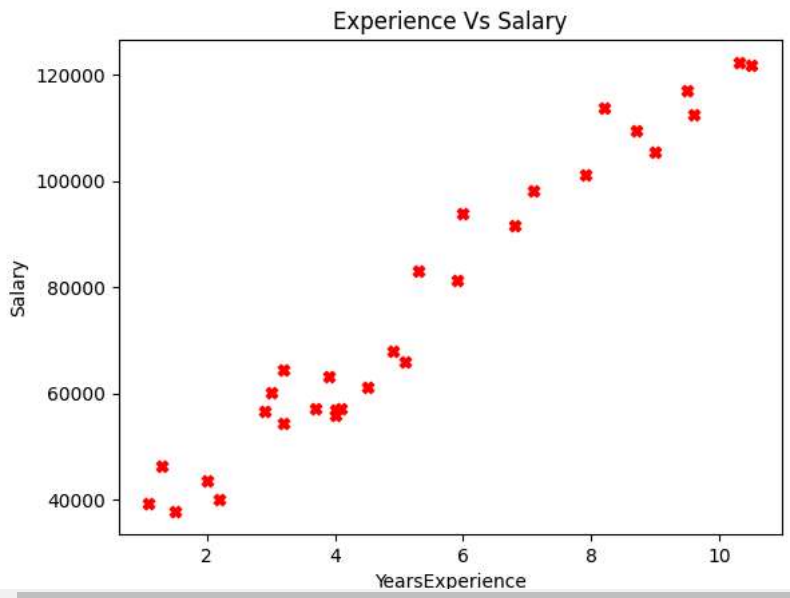
Plot graph

```
df.plot('YearsExperience','Salary',color='Skyblue',linestyle='--')
plt.title('Experience Vs Salary')
plt.xlabel('YearsExperience')
plt.ylabel('Salary')
plt.show()
```



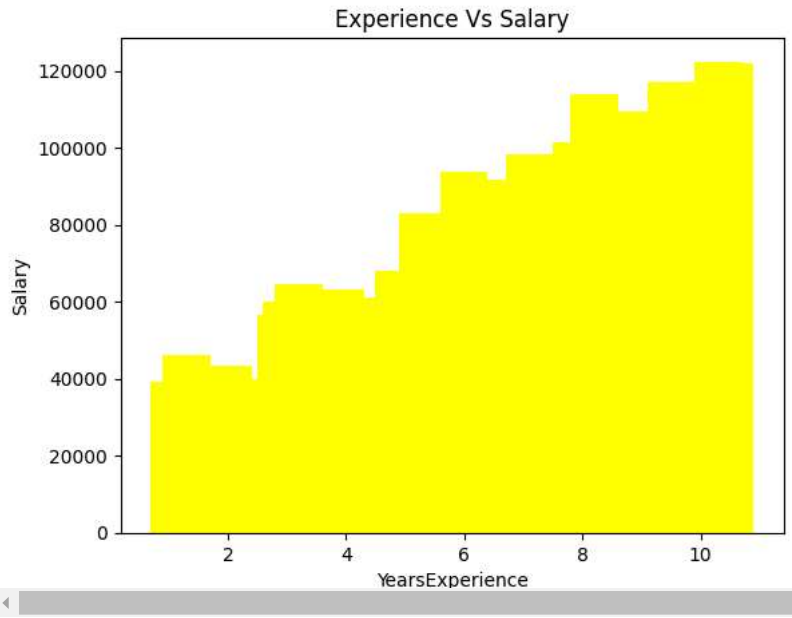
Scatter Plot

```
plt.scatter(df['YearsExperience'],df['Salary'],color='red',marker='X')
plt.xlabel('YearsExperience')
plt.ylabel('Salary')
plt.title('Experience Vs Salary')
plt.show()
```

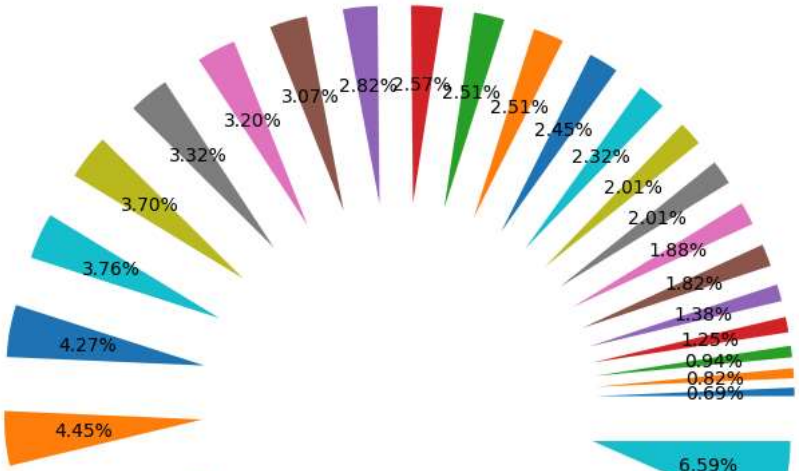


Bar Graph

```
plt.bar(df['YearsExperience'],df['Salary'],color='Yellow')
plt.xlabel('YearsExperience')
plt.ylabel('Salary')
plt.title('Experience Vs Salary')
plt.show()
```




```
plt.pie(df['YearsExperience'],df['Salary']==df['Salary'],autopct='%1.2f%%')
plt.show()
```




```
plt.hist(df,bins=5)
plt.xlabel('Salary')
plt.ylabel('No worker')
plt.title('Worker Vs Salary')
plt.show()
```