

Exersice-1 pandas_matplotlib

In [2]:

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

In [3]:

```
data = pd.read_csv('D:/ML/Lab_1/Data_for_Transformation.csv')
data.head(5)
```

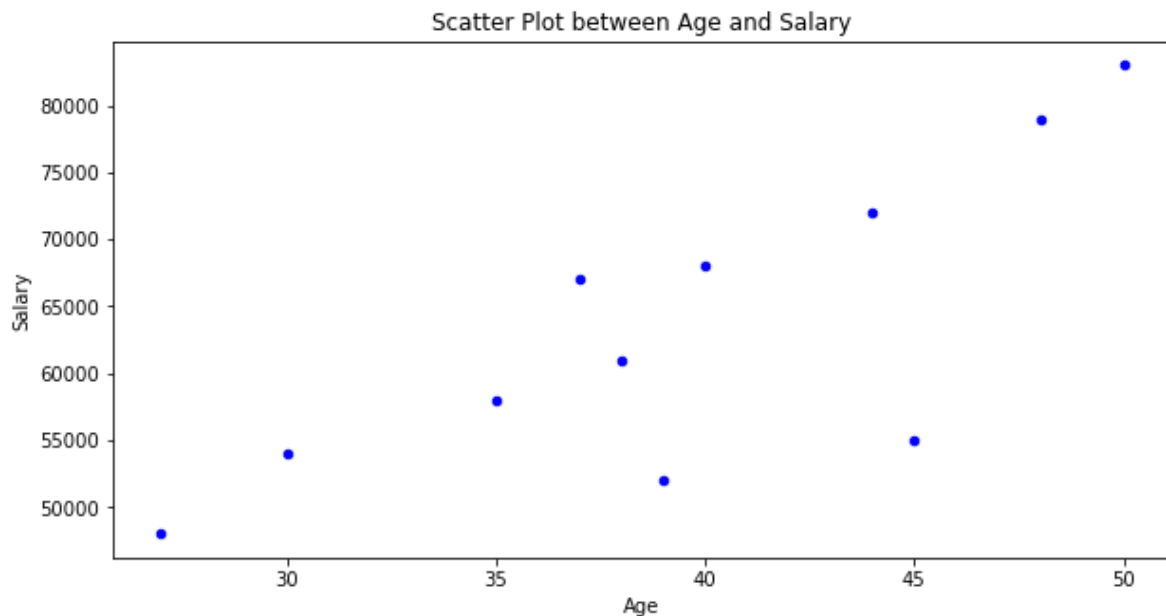
Out[3]:

	Country	Age	Salary	Purchased
0	France	44	72000	No
1	Spain	27	48000	Yes
2	Germany	30	54000	No
3	Spain	38	61000	No
4	Germany	40	68000	Yes

1) Draw Scatter Plot between age and salary for "Data_for_Transformation.csv" file

In [4]:

```
data.plot(kind='scatter',x='Age',y='Salary',figsize = (10,5),color='blue')
plt.title("Scatter Plot between Age and Salary")
plt.xlabel('Age')
plt.ylabel('Salary')
plt.show()
```



2) Draw Histogram of Salary

In [5]:

```
count,sal = np.histogram(data['Salary'])
data['Salary'].plot(kind='hist',figsize=(8,5),xticks=sal,alpha=0.65)
plt.title("Histogram of Salary")
plt.xlabel("Salary")
plt.show()
```



3) Plot bar chart of Country

In [6]:

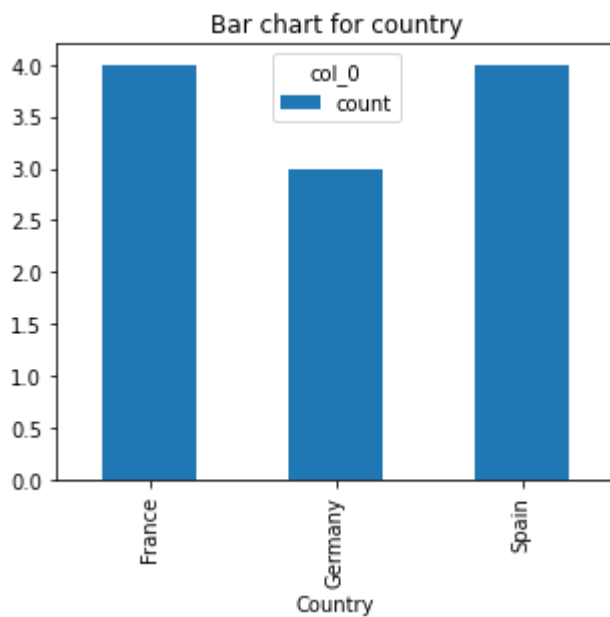
```
data_country = pd.crosstab(index = data['Country'],columns = ['count'],dropna=True)  
data_country
```

Out[6]:

	col_0	count
Country		
France		4
Germany		3
Spain		4

In [7]:

```
data_country.plot(kind='bar',figsize=(5,4))  
plt.title("Bar chart for country")  
plt.xlabel("Country")  
plt.show()
```



In []: