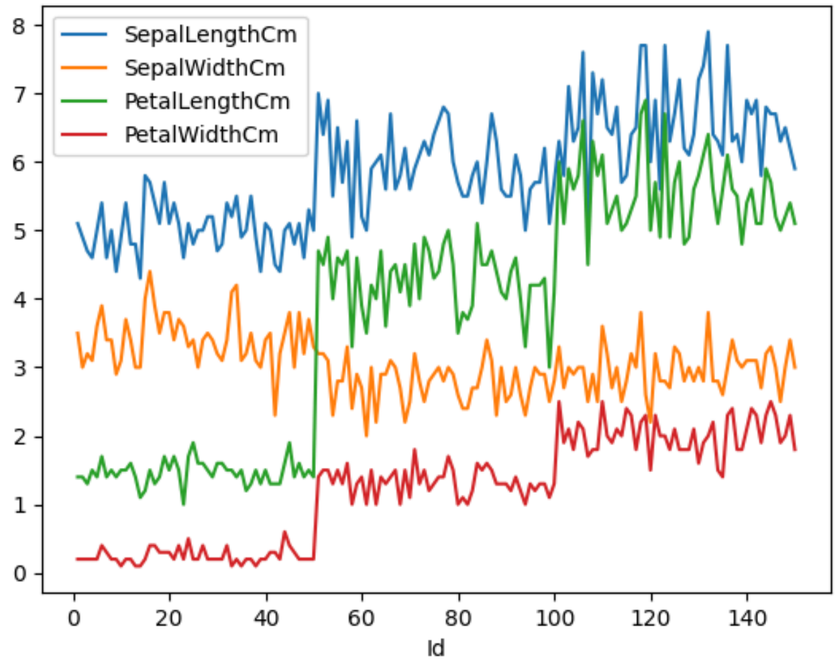
Pandas Built in Data Visualisation

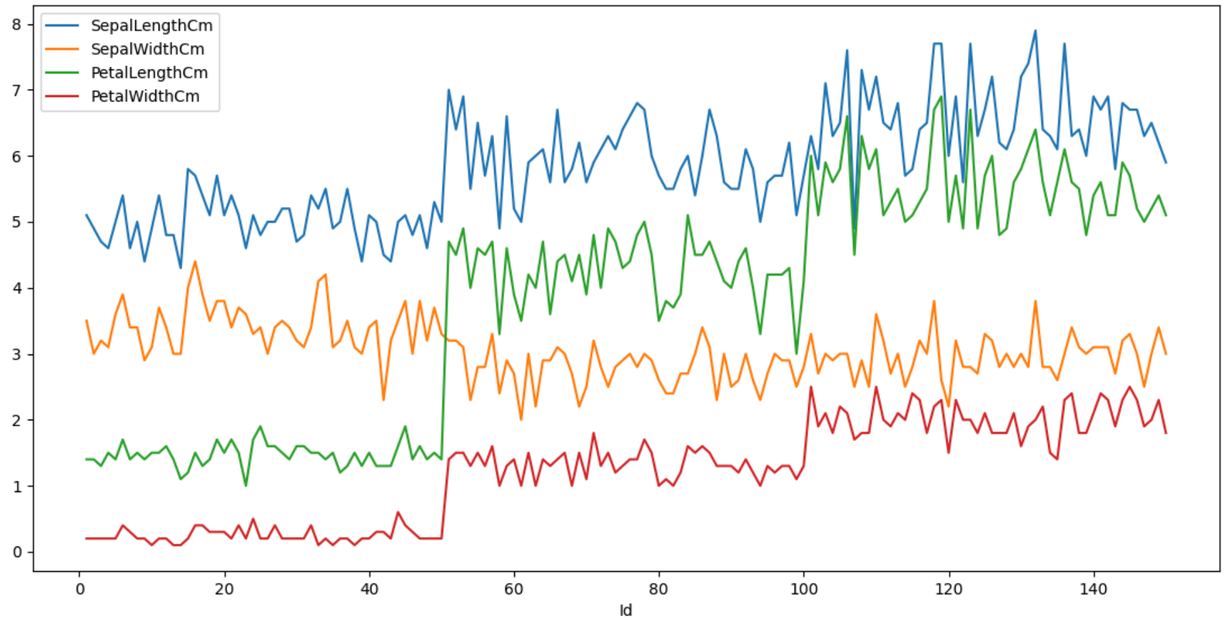
Draw a Line Plot for all The Numeric Columns

```
import pandas as pd
import matplotlib.pyplot as plt
data=pd.read_csv("https://raw.githubusercontent.com/DataThinkers/Datasets/refs/heads/main/DS/iri
print(data)
data.plot()
plt.show()
```



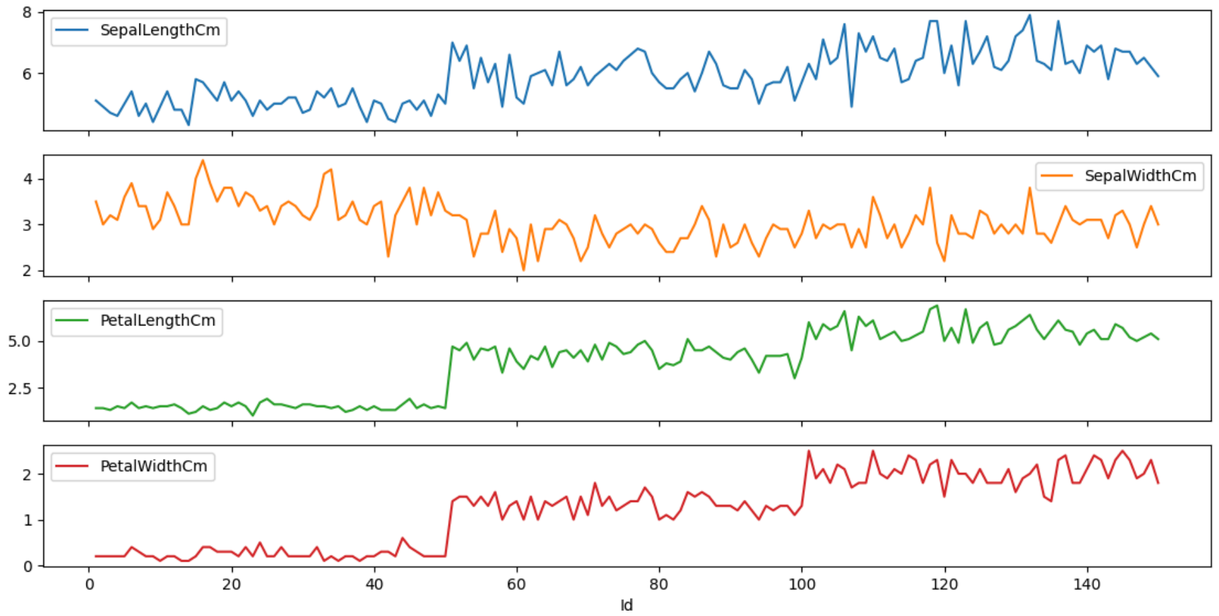
Change Size of a Figure & Font: Figure Size :The Width of 15 and Height of 10 ,Font Size:10

```
import pandas as pd
import matplotlib.pyplot as plt
data=pd.read_csv( filepath_or_buffer: "https://raw.githubusercontent.com/DataThinkers/Datas
print(data)
data.plot(figsize=(15,10),fontsize=10)
plt.show()
```



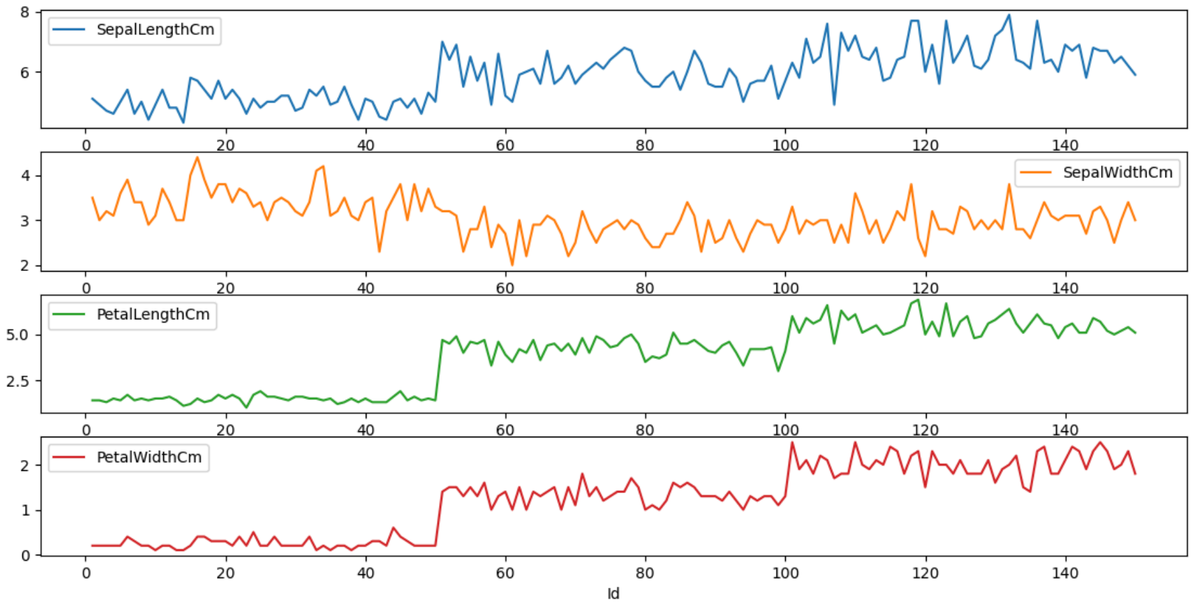
Make Separate SubPlots for Each Column

```
import pandas as pd
import matplotlib.pyplot as plt
data=pd.read_csv( filepath_or_buffer: "https://raw.githubusercontent.com/DataThinkers/Data
print(data)
data.plot(subplots=True,figsize=(15,10),fontsize=10)
plt.show()
```



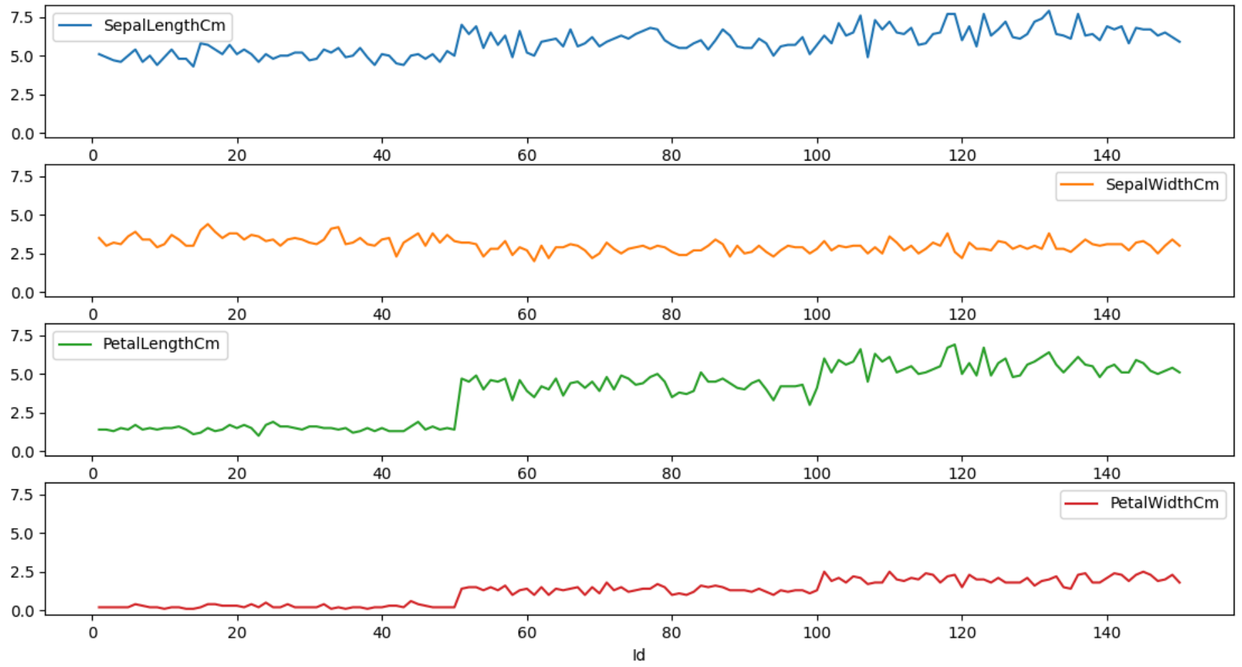
Share X-Axis Values with Other Columns

```
import pandas as pd
import matplotlib.pyplot as plt
data=pd.read_csv( filepath_or_buffer: "https://raw.githubusercontent.com/DataTh
print(data)
data.plot(subplots=True,figsize=(15,10),fontsize=10,sharex=False)
plt.show()
```



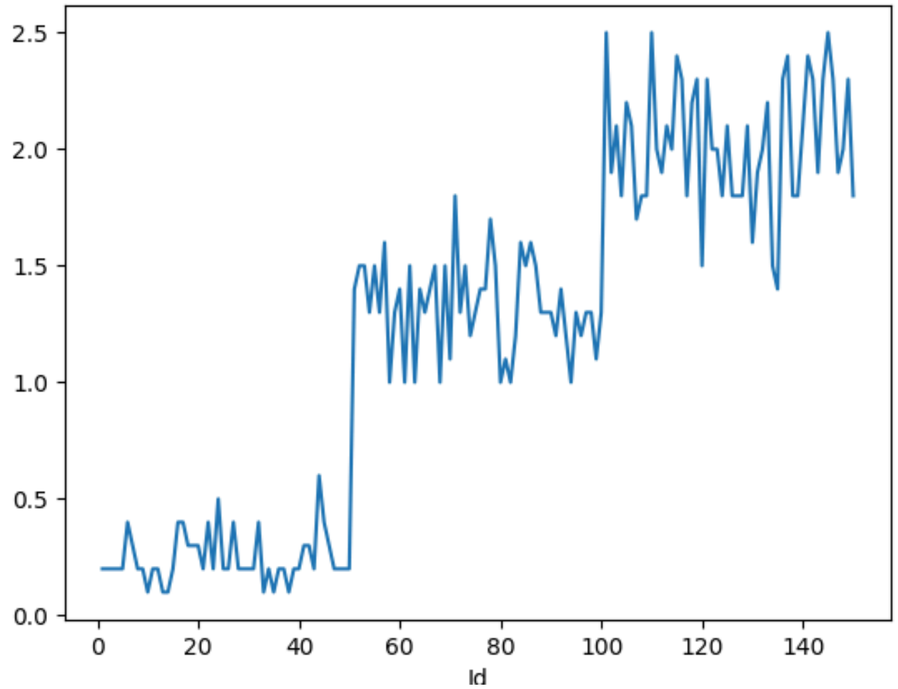
Share Y-Axis Values with Other Graphs

```
import pandas as pd
import matplotlib.pyplot as plt
data=pd.read_csv( filepath_or_buffer: "https://raw.githubusercontent.com/DataThinkers
print(data)
data.plot(subplots=True,figsize=(15,10),fontsize=10,sharex=False,sharey=True)
plt.show()
```



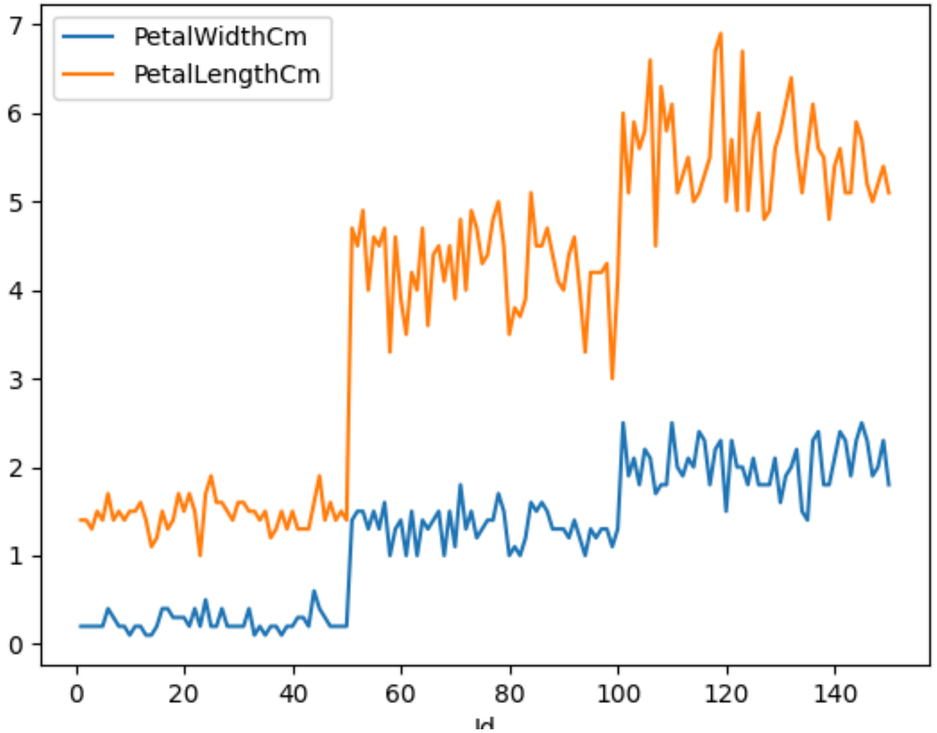
Draw the Line Plot only for Petal Width Column

```
import pandas as pd
import matplotlib.pyplot as plt
data=pd.read_csv( filepath_or_buffer: "https://raw.githubusercontent.com/Data
print(data)
data["PetalWidthCm"].plot()
plt.show()
```



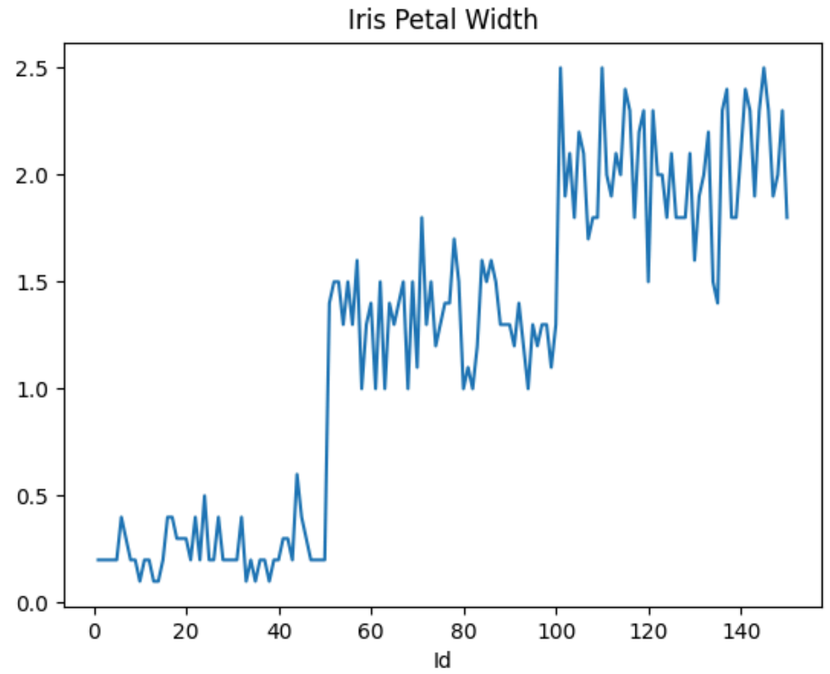
Draw the Line Plot only for two columns

```
import pandas as pd
import matplotlib.pyplot as plt
data=pd.read_csv( filepath_or_buffer: "https://raw.githubusercontent.com/DataThinkers/Datas
print(data)
data[["PetalWidthCm","PetalLengthCm"]].plot()
plt.show()
```



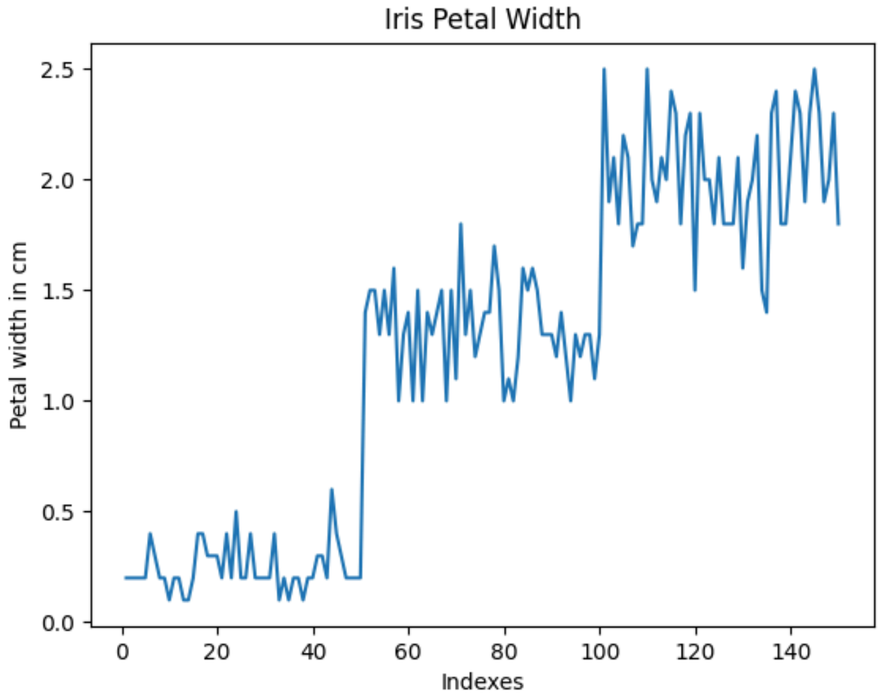
Add the Title and Labels to X-Axis & Y-Axis

```
import pandas as pd
import matplotlib.pyplot as plt
data=pd.read_csv( filepath_or_buffer: "https://raw.githubusercontent.com/DataThinkers/Datasets/r
print(data)
data["PetalWidthCm"].plot(title="Iris Petal Width")
plt.show()
```



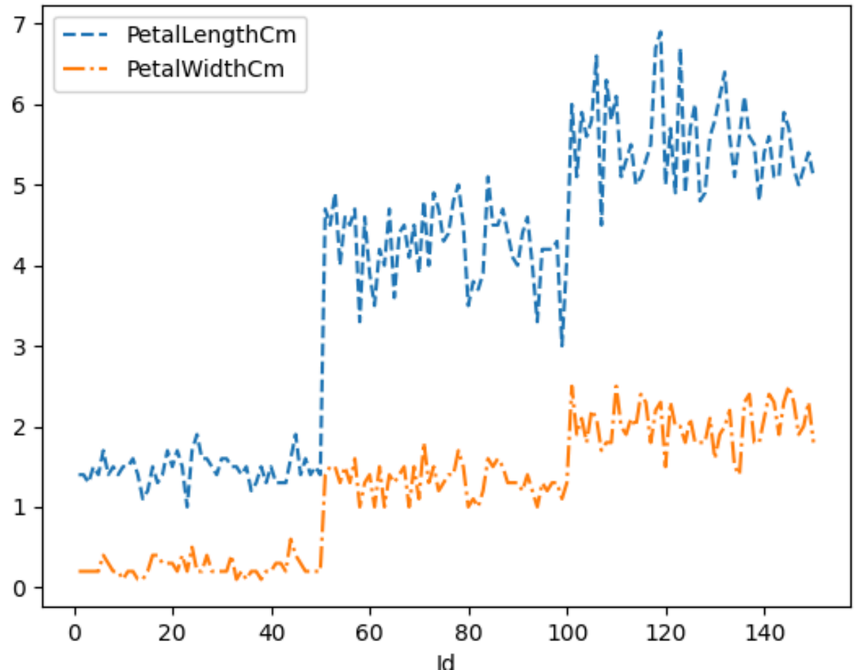
Adding Labels

```
import pandas as pd
import matplotlib.pyplot as plt
data=pd.read_csv( filepath_or_buffer: "https://raw.githubusercontent.com/DataThinkers/Datasets/refs/heads/
print(data)
data["PetalWidthCm"].plot(title="Iris Petal Width",xlabel="Indexes",ylabel="Petal width in cm")
plt.show()
```



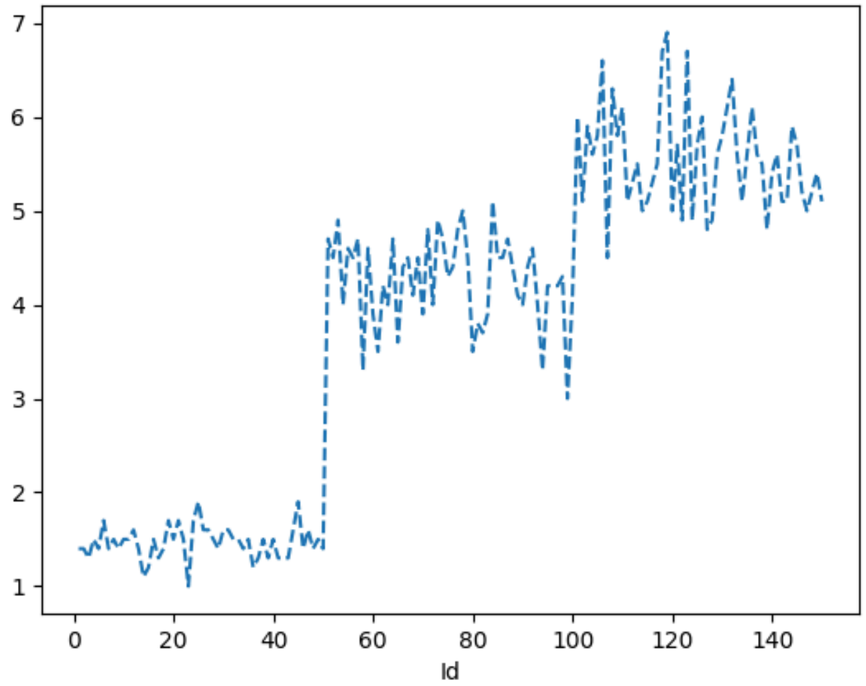
Draw the Line Plot for Petal Length & Petal Width columns(Also change Line Style)

```python
import pandas as pd
import matplotlib.pyplot as plt
data=pd.read_csv( filepath_or_buffer: "https://raw.githubusercontent.com/DataThinkers/Datasets/refs/h
print(data)
data[["PetalLengthCm","PetalWidthCm"]].plot(style=["--","-."])
plt.show()
```



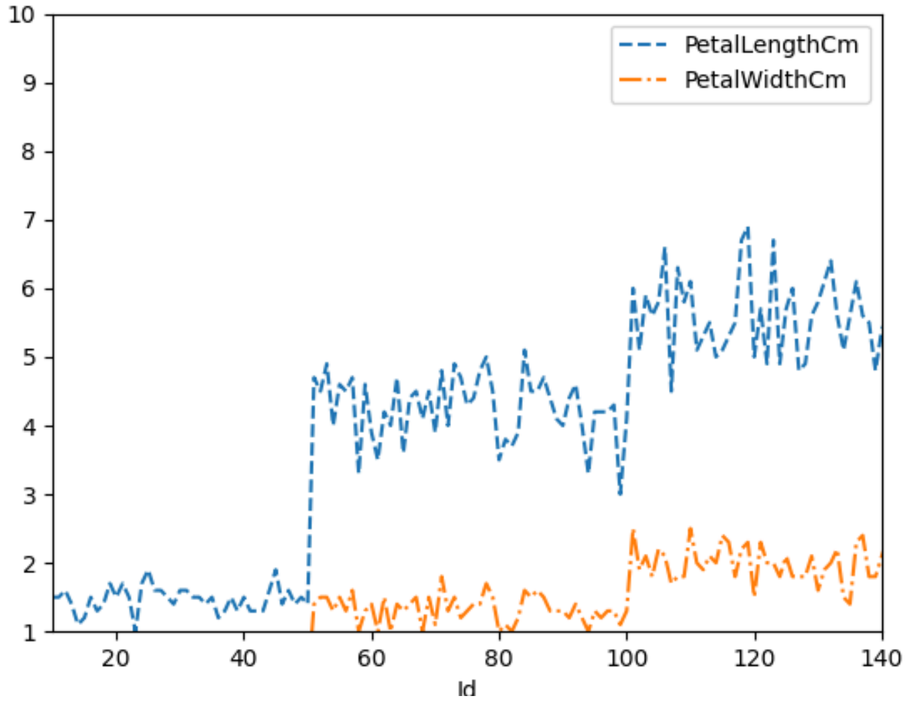
Draw the Line Plot for Petal Length & Petal Width columns(Also change Line Style), just for One Column

```
import pandas as pd
import matplotlib.pyplot as plt
data=pd.read_csv( filepath_or_buffer: "https://raw.githubusercontent.com/DataThinkers/Datasets/
print(data)
data["PetalLengthCm"].plot(style="--")
plt.show()
```



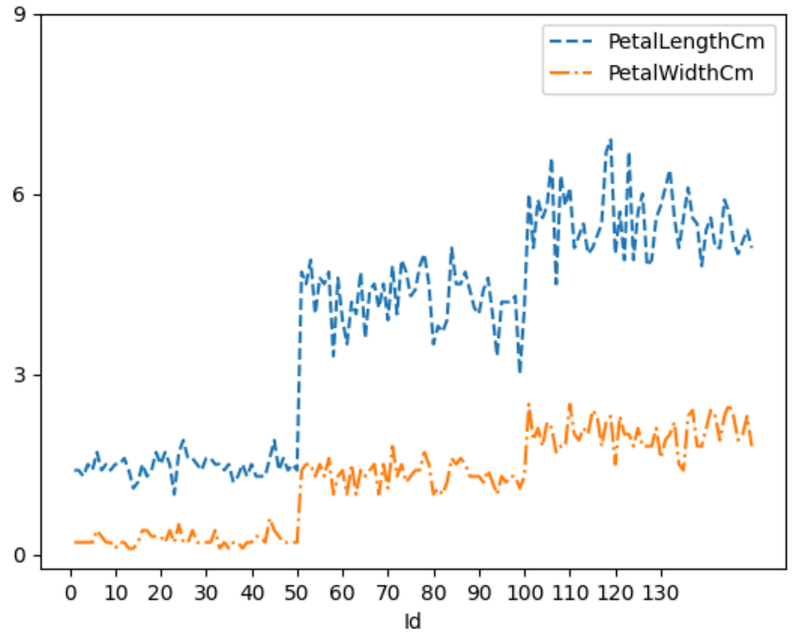
Draw the Line Plot for Petal Length Petal Width Column(Change limit of X and Y Axis)

```
import pandas as pd
import matplotlib.pyplot as plt
data=pd.read_csv( filepath_or_buffer: "https://raw.githubusercontent.com/DataThinkers/Datasets/refs/heads
print(data)
data[["PetalLengthCm","PetalWidthCm"]].plot(style=["--","-."],xlim=(10,140),ylim=(1,10))
plt.show()
```



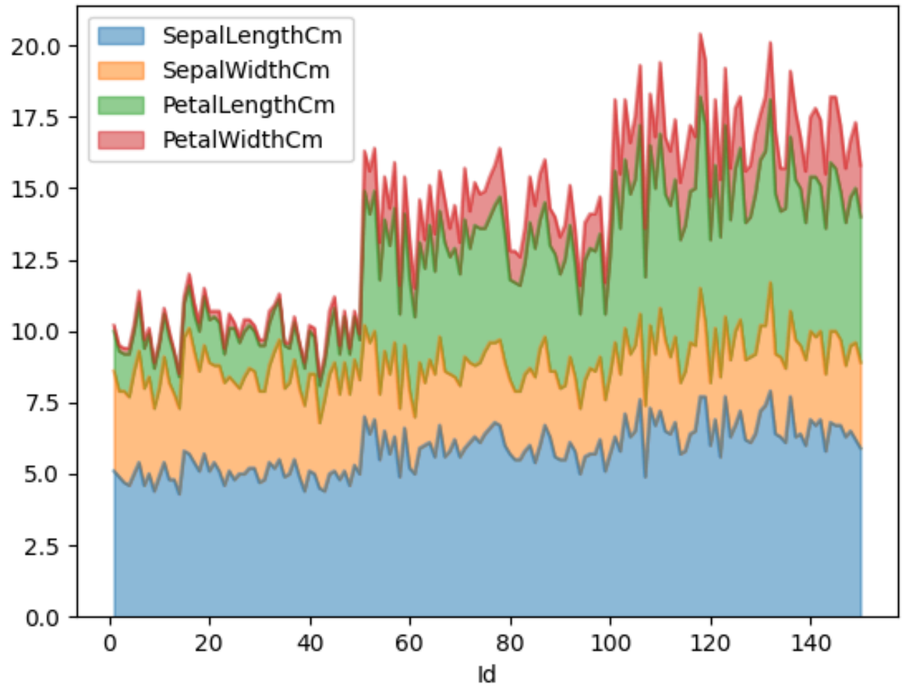
xticks and yticks

```
import pandas as pd
import matplotlib.pyplot as plt
data=pd.read_csv( filepath_or_buffer: "https://raw.githubusercontent.com/DataThinkers/Datasets/r
print(data)
x=[x for x in range(0,140,10)]
y=[y for y in range(0,10,3)]
data[["PetalLengthCm","PetalWidthCm"]].plot(style=["--","-."],xticks=x,yticks=y)
plt.show()
```



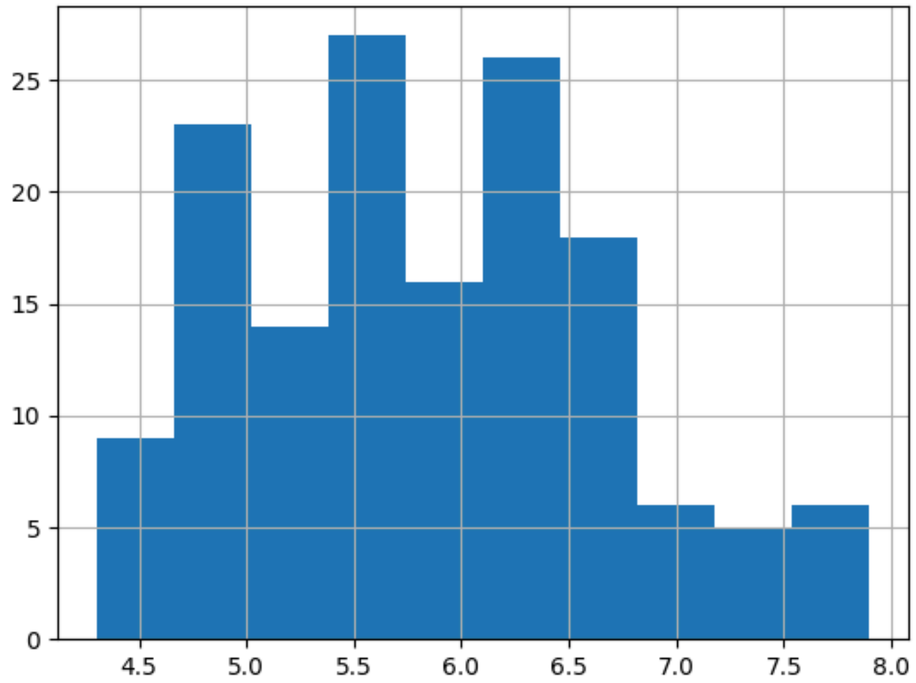
Area Plot

```
import pandas as pd
import matplotlib.pyplot as plt
data=pd.read_csv( filepath_or_buffer: "https://raw.githubusercontent.com/DataThinkers/Data
print(data)
data.plot(kind="area",alpha=0.5)
plt.show()
```

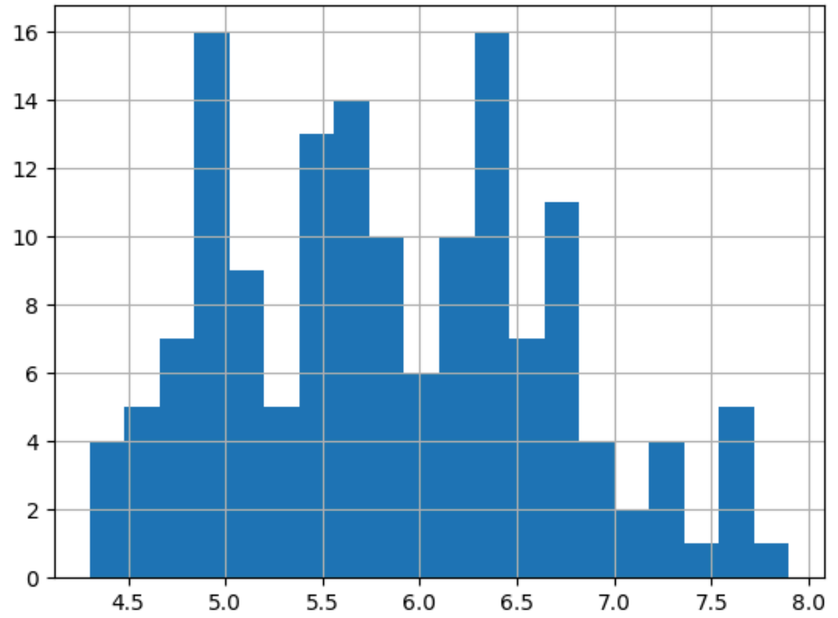


Draw Histogram for SepalLength Column

```
import pandas as pd
import matplotlib.pyplot as plt
data=pd.read_csv( filepath_or_buffer: "https://raw.githubusercontent.com/DataT
print(data)
data["SepalLengthCm"].hist()
plt.show()
```

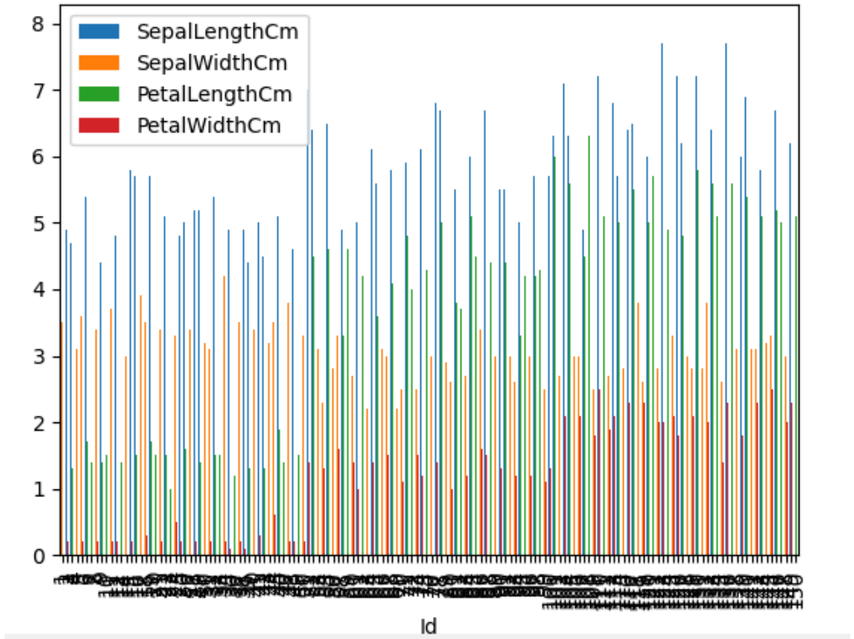



```
import pandas as pd
import matplotlib.pyplot as plt
data=pd.read_csv( filepath_or_buffer: "https://raw.githubusercontent.com/DataT
print(data)
data["SepalLengthCm"].hist(bins=20)
plt.show()
```



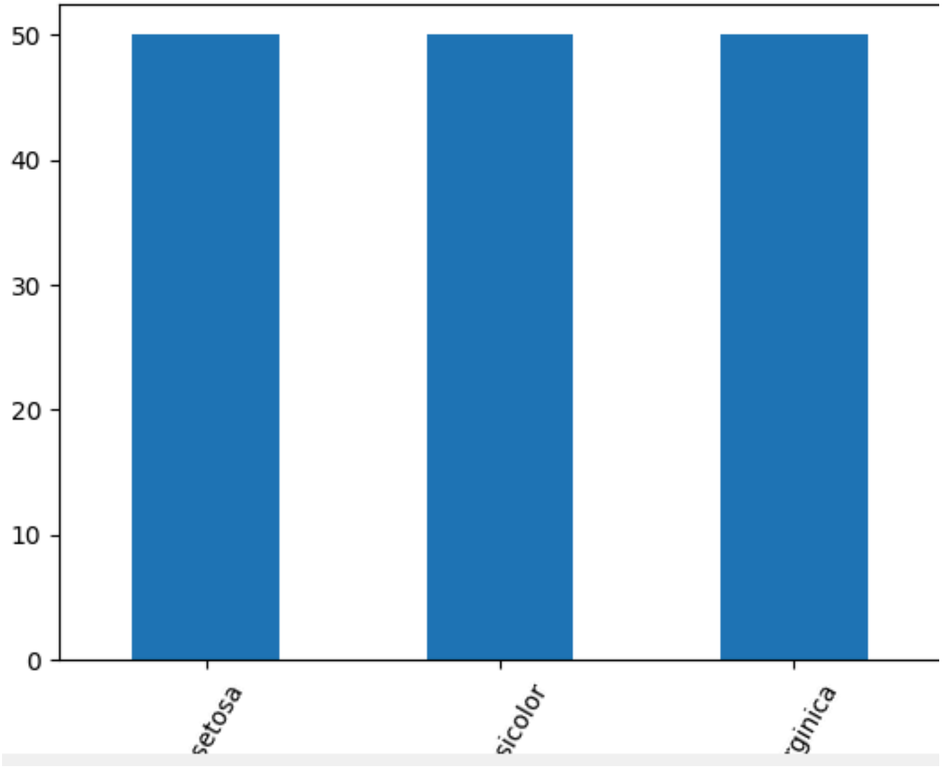
Bar Plot

```
import pandas as pd
import matplotlib.pyplot as
data=pd.read_csv( filepath_or_b
print(data)
data.plot.bar()
plt.show()
```



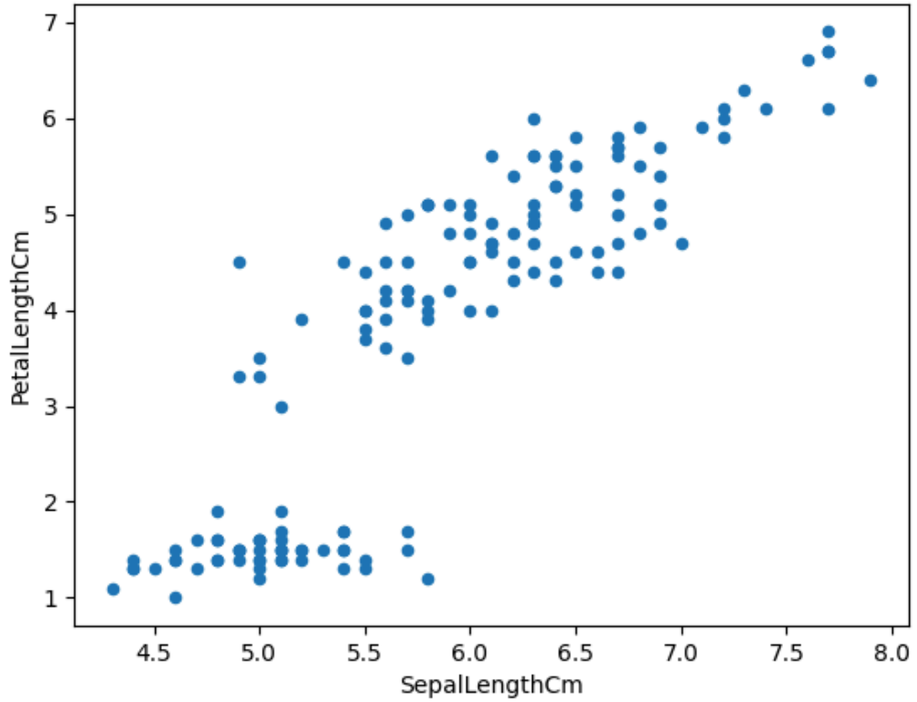
For small data

```
import pandas as pd
import matplotlib.pyplot as plt
data=pd.read_csv( filepath_or_buffer: "https://raw.githubusercontent.com/Dat
print(data)
data["Species"].value_counts().plot.bar(rot=60)
plt.show()
```



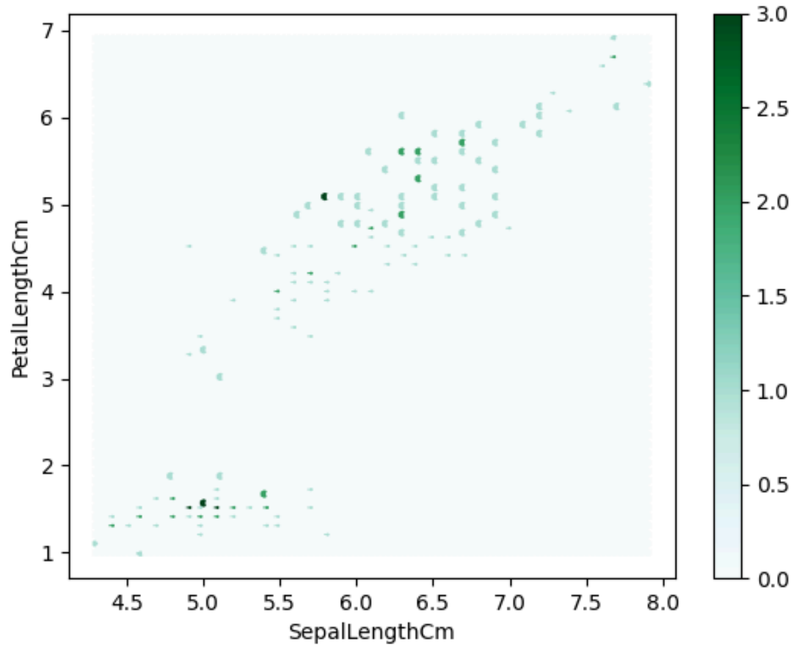
Scatter Plot

```
import pandas as pd
import matplotlib.pyplot as plt
data=pd.read_csv( filepath_or_buffer: "https://raw.githubusercontent.com/DataThinkers/Datasets
print(data)
data.plot.scatter(x="SepalLengthCm",y="PetalLengthCm")
plt.show()
```



Hexbin Plot

```
import pandas as pd
import matplotlib.pyplot as plt
data=pd.read_csv( filepath_or_buffer: "https://raw.githubusercontent.com/Da
print(data)
data.plot(kind="hexbin",x="SepalLengthCm",y="PetalLengthCm")
plt.show()
```



Box Plot

```
import pandas as pd
import matplotlib.pyplot as plt
data=pd.read_csv( filepath_or_buffer: "https://raw.githubusercontent.com/DataThin
print(data)
data.plot.box()
plt.show()
```