

```
In [1]: import pandas as pd

# reading the database
data = pd.read_csv("Iris.csv")

# printing the top 10 rows
display(data.head(10))
```

	Id	SepalLengthCm	SepalWidthCm	PetalLengthCm	PetalWidthCm	Species
0	1	5.1	3.5	1.4	0.2	Iris-setosa
1	2	4.9	3.0	1.4	0.2	Iris-setosa
2	3	4.7	3.2	1.3	0.2	Iris-setosa
3	4	4.6	3.1	1.5	0.2	Iris-setosa
4	5	5.0	3.6	1.4	0.2	Iris-setosa
5	6	5.4	3.9	1.7	0.4	Iris-setosa
6	7	4.6	3.4	1.4	0.3	Iris-setosa
7	8	5.0	3.4	1.5	0.2	Iris-setosa
8	9	4.4	2.9	1.4	0.2	Iris-setosa
9	10	4.9	3.1	1.5	0.1	Iris-setosa

Scatter Plot

```
In [5]: import pandas as pd
import matplotlib.pyplot as plt

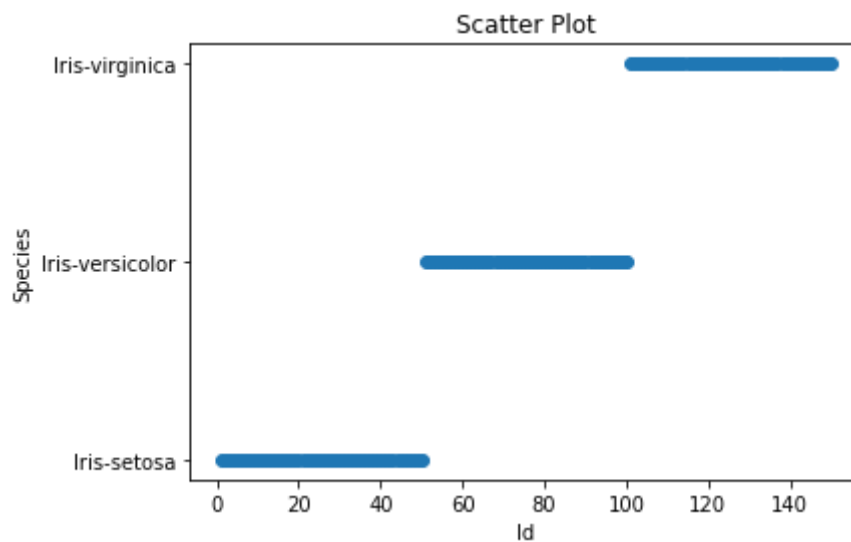
# reading the database
data = pd.read_csv("Iris.csv")

# Scatter plot with day against tip
plt.scatter(data['Id'], data['Species'])

# Adding Title to the Plot
plt.title("Scatter Plot")

# Setting the X and Y labels
plt.xlabel('Id')
plt.ylabel('Species')

plt.show()
```



```
In [9]: import pandas as pd
import matplotlib.pyplot as plt

# reading the database
data = pd.read_csv("Iris.csv")

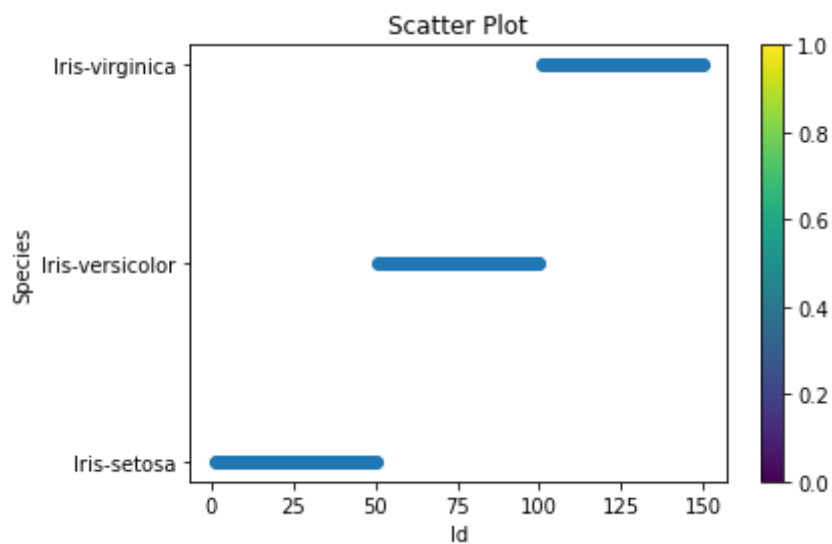
# Scatter plot with day against tip
plt.scatter(data['Id'], data['Species'])

# Adding Title to the Plot
plt.title("Scatter Plot")

# Setting the X and Y labels
plt.xlabel('Id')
plt.ylabel('Species')

plt.colorbar()

plt.show()
```



Line Chart

```
In [11]: import pandas as pd
import matplotlib.pyplot as plt

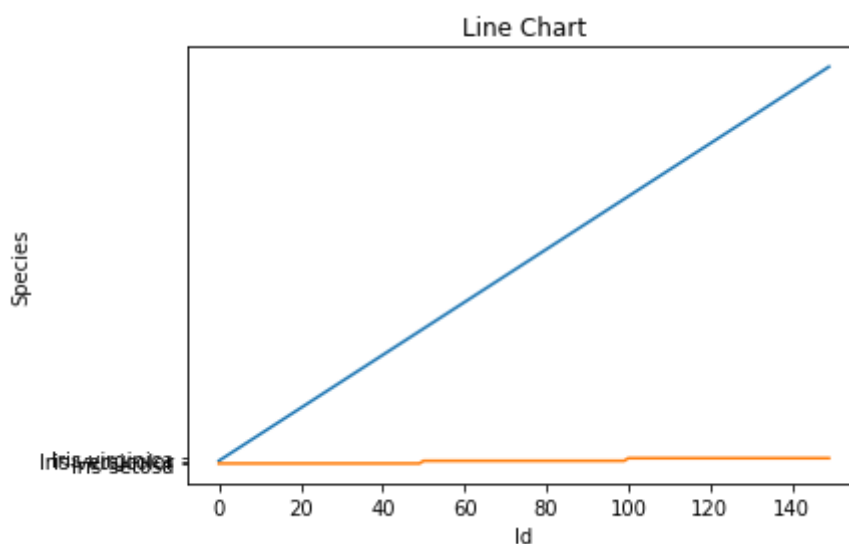
# reading the database
data = pd.read_csv("Iris.csv")

# Scatter plot with day against tip
plt.plot(data['Id'])
plt.plot(data['Species'])

# Adding Title to the Plot
plt.title("Line Chart")

# Setting the X and Y labels
plt.xlabel('Id')
plt.ylabel('Species')

plt.show()
```



Bar Chart

```
In [26]: import pandas as pd
import matplotlib.pyplot as plt

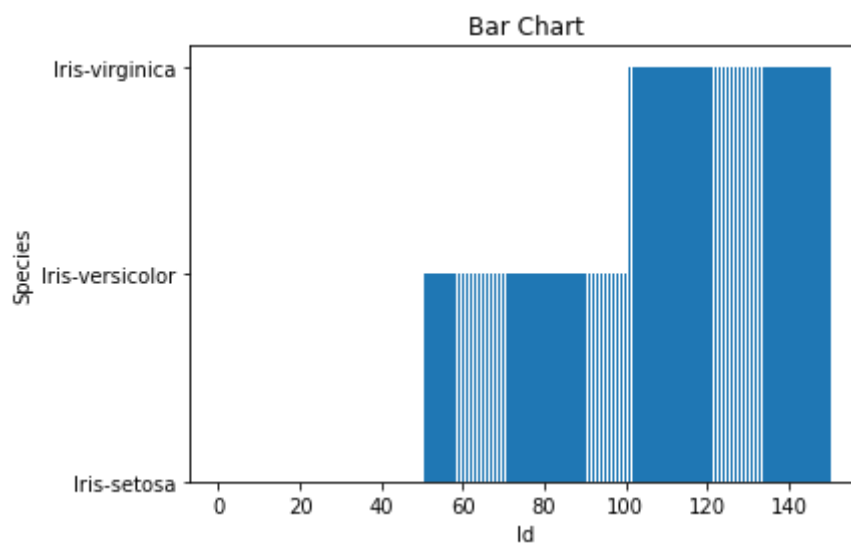
# reading the database
data = pd.read_csv("Iris.csv")

# Bar chart with day against tip
plt.bar(data['Id'], data['Species'])

plt.title("Bar Chart")

# Setting the X and Y labels
plt.xlabel('Id')
plt.ylabel('Species')

# Adding the legends
plt.show()
```



Histogram

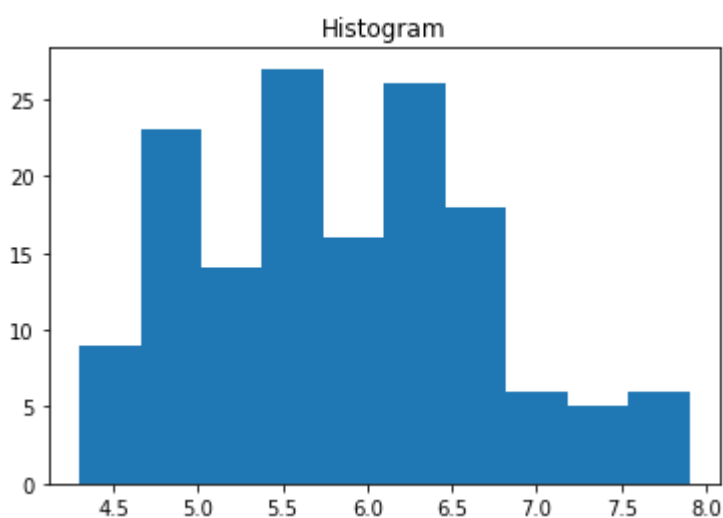
```
In [14]: import pandas as pd
import matplotlib.pyplot as plt

# reading the database
data = pd.read_csv("Iris.csv")

# histogram of total_bills
plt.hist(data['SepalLengthCm'])

plt.title("Histogram")

# Adding the legends
plt.show()
```



Title using Matplotlib Function using seaborn

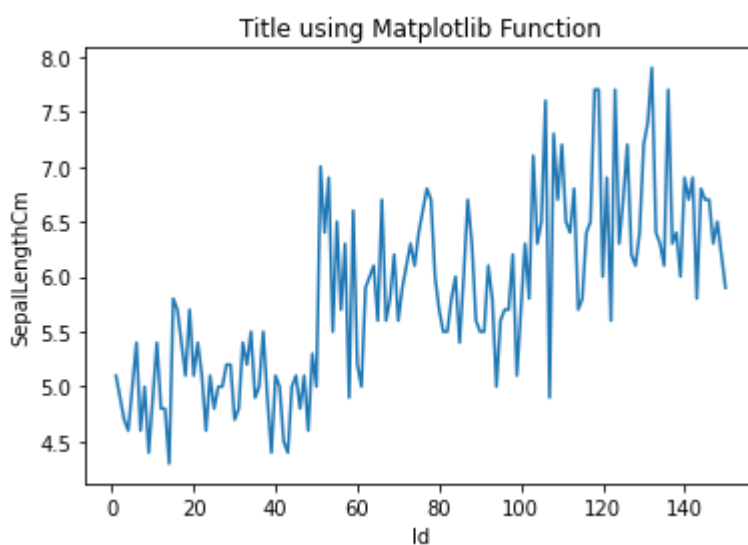
```
In [23]: # importing packages
import seaborn as sns
import matplotlib.pyplot as plt
import pandas as pd

# reading the database
data = pd.read_csv("Iris.csv")

# draw lineplot
sns.lineplot(x="Id", y="SepalLengthCm", data=data)

# setting the title using Matplotlib
plt.title('Title using Matplotlib Function')

plt.show()
```

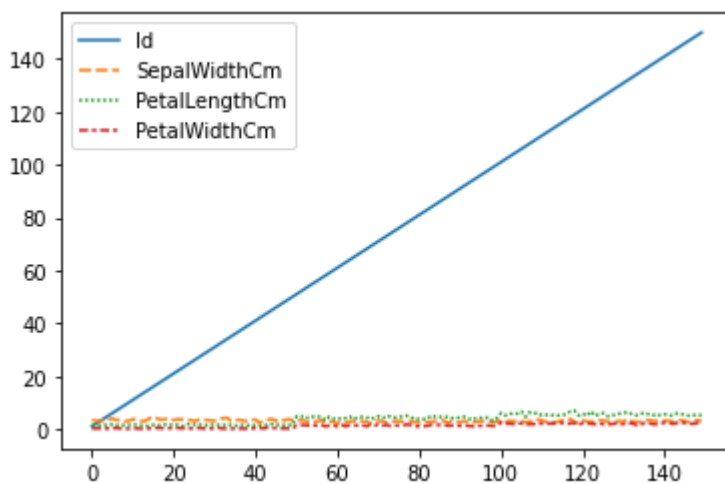


reading the database using Seaborn

```
In [19]: # importing packages
import seaborn as sns
import matplotlib.pyplot as plt
import pandas as pd

# reading the database
data = pd.read_csv("Iris.csv")

# using only data attribute
sns.lineplot(data=data.drop(['SepalLengthCm'], axis=1))
plt.show()
```



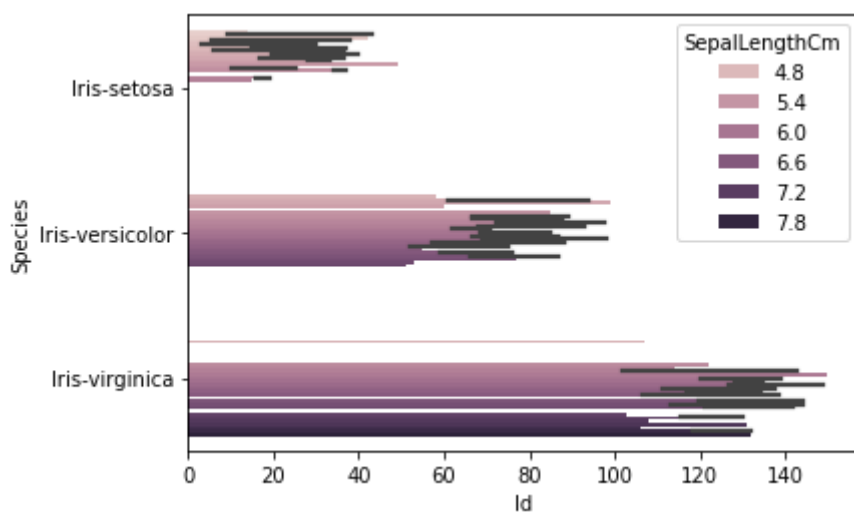
**sepalength representation using
seaborn**


```
In [24]: # importing packages
import seaborn as sns
import matplotlib.pyplot as plt
import pandas as pd

# reading the database
data = pd.read_csv("Iris.csv")

sns.barplot(x='Id', y='Species', data=data,
            hue='SepalLengthCm')

plt.show()
```



Heatmap

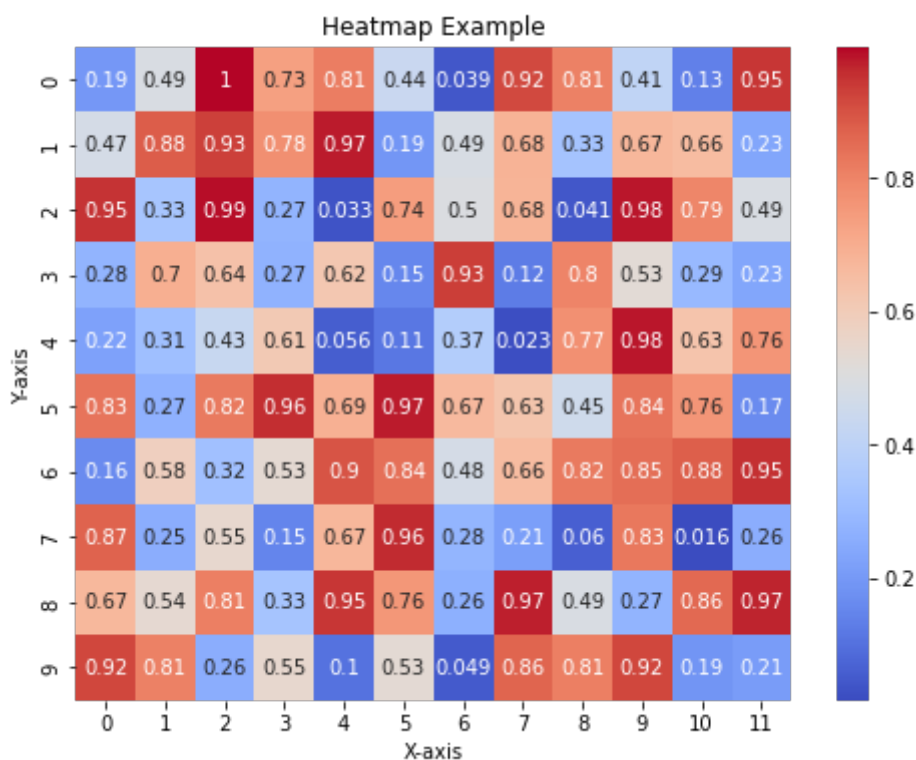
```
In [21]: import matplotlib.pyplot as plt
import seaborn as sns
import numpy as np

# Generate some example data
data = np.random.rand(10, 12)

# Create a heatmap using Seaborn
plt.figure(figsize=(8, 6))
sns.heatmap(data, annot=True, cmap='coolwarm')

# Add labels and title
plt.xlabel('X-axis')
plt.ylabel('Y-axis')
plt.title('Heatmap Example')

# Show the plot
plt.show()
```



Pair Chart using seaborn

```
In [25]: import seaborn as sns
import matplotlib.pyplot as plt
import pandas as pd

# Load example dataset (you can use your own dataset here)
iris = sns.load_dataset('iris')

# Create a pair plot
sns.pairplot(iris, hue='species', markers=['o', 's', 'D'])

# Show the plot
plt.show()
```

