```
import pandas as pd
import seaborn as sns


path="/Iris.csv"
df=pd.read_csv(path)
df
```

	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
...	...	...	...	...	...	...
145	146	6.7	3.0	5.2	2.3	Iris-virginica
146	147	6.3	2.5	5.0	1.9	Iris-virginica
147	148	6.5	3.0	5.2	2.0	Iris-virginica
148	149	6.2	3.4	5.4	2.3	Iris-virginica
149	150	5.9	3.0	5.1	1.8	Iris-virginica

150 rows × 6 columns

```
# df.drop('Id',axis=1,inplace=True)


df.info
```

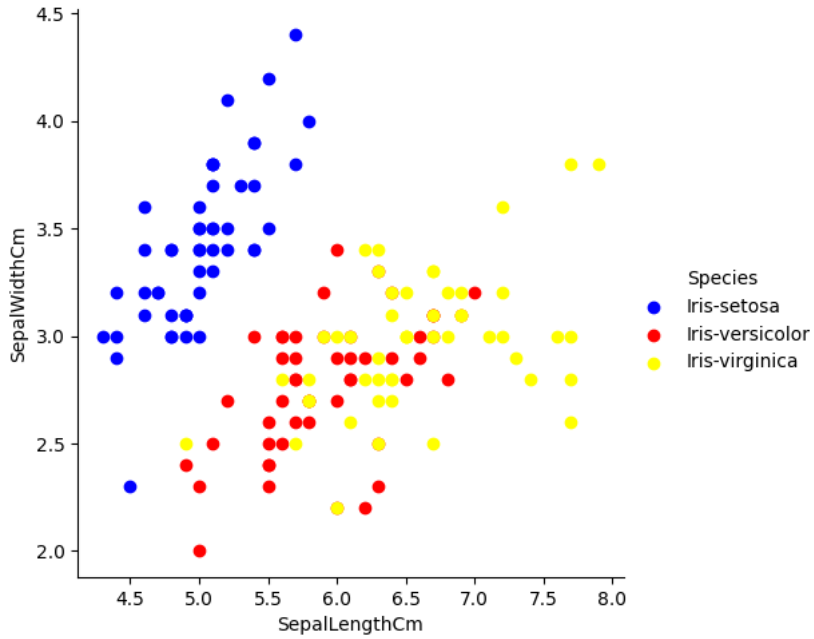
```
<bound method DataFrame.info of       Id  SepalLengthCm  SepalWidthCm  PetalLengthCm  PetalWidthCm  \
0      1            5.1           3.5            1.4           0.2
1      2            4.9           3.0            1.4           0.2
2      3            4.7           3.2            1.3           0.2
3      4            4.6           3.1            1.5           0.2
4      5            5.0           3.6            1.4           0.2
..   ...            ...           ...            ...           ...
145  146            6.7           3.0            5.2           2.3
146  147            6.3           2.5            5.0           1.9
147  148            6.5           3.0            5.2           2.0
148  149            6.2           3.4            5.4           2.3
149  150            5.9           3.0            5.1           1.8

            Species
0       Iris-setosa
1       Iris-setosa
2       Iris-setosa
3       Iris-setosa
4       Iris-setosa
..              ...
145  Iris-virginica
146  Iris-virginica
147  Iris-virginica
148  Iris-virginica
149  Iris-virginica

[150 rows x 6 columns]>
```

```
df['Species'].value_counts()
```

```
Iris-setosa        50
Iris-versicolor    50
Iris-virginica     50
Name: Species, dtype: int64
```

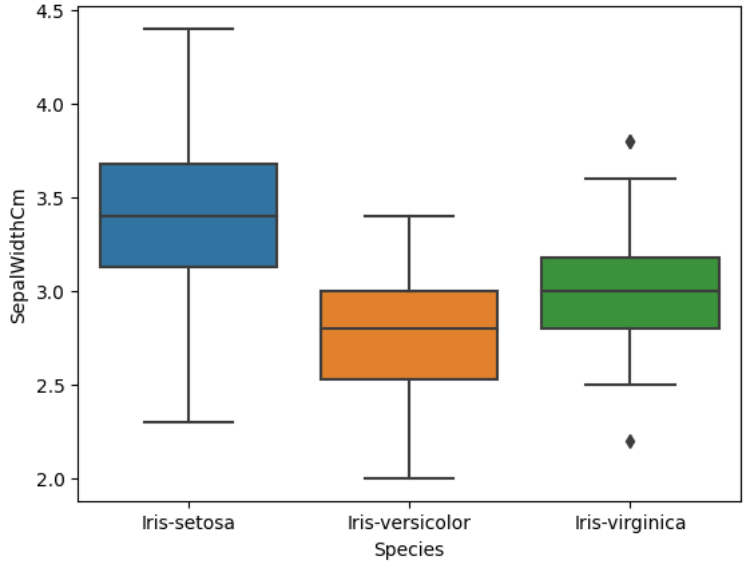
```
import matplotlib.pyplot as plt
import seaborn as sns

%matplotlib inline

KS = {'color': ['blue', 'red', 'yellow']}
sns.FacetGrid(df, hue='Species', hue_kws=KS, height=5)\
    .map(plt.scatter, 'SepalLengthCm', 'SepalWidthCm')\
    .add_legend()
```

```
<seaborn.axisgrid.FacetGrid at 0x7f1cb8e099c0>
```

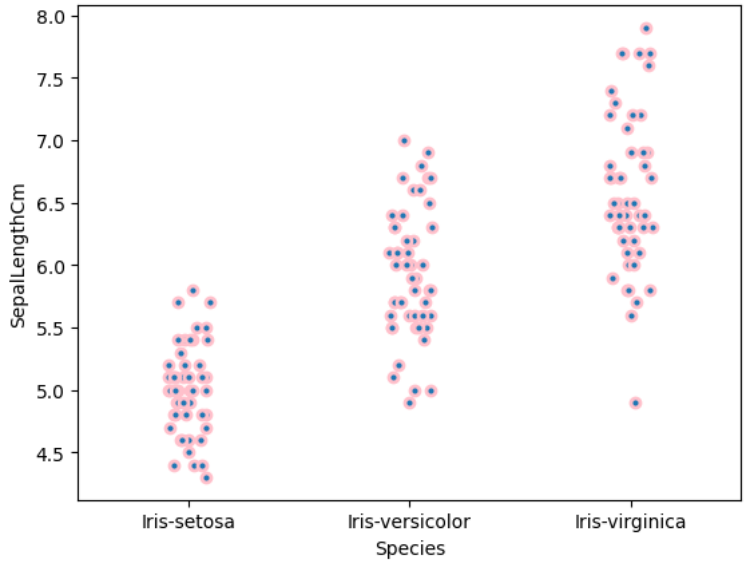



```
sns.boxplot(x="Species",y="SepalWidthCm",data=df)
```

```
<Axes: xlabel='Species', ylabel='SepalWidthCm'>
```

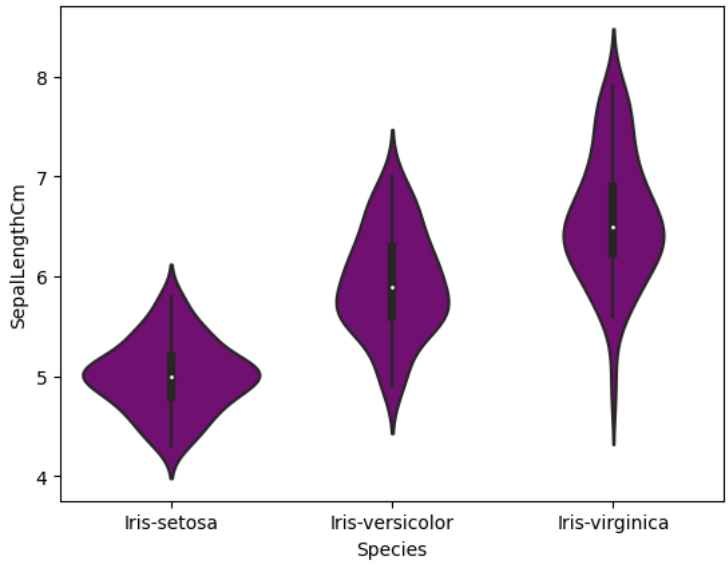



```
ax=sns.stripplot(x='Species',y='SepalLengthCm',data=df,jitter=True,linewidth=2,edgecolor='pink')
```



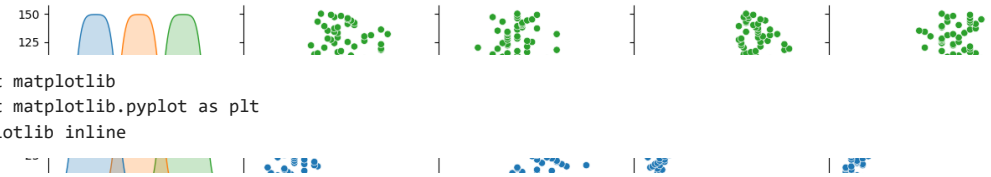

```
sns.violinplot(x='Species',y='SepalLengthCm',data=df,size=6,color="purple")
```

```
<Axes: xlabel='Species', ylabel='SepalLengthCm'>
```




```
sns.pairplot(df,hue='Species')
```

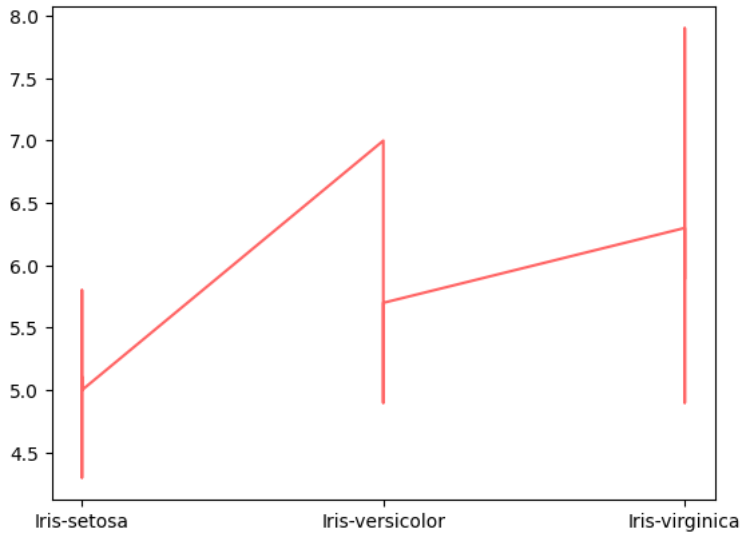
```
<seaborn.axisgrid.PairGrid at 0x7f1cb8e0bd90>
```



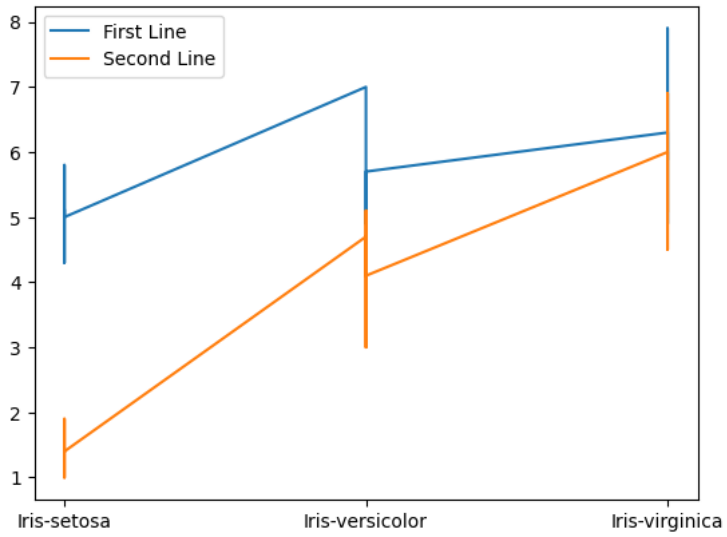
```
import matplotlib
import matplotlib.pyplot as plt
%matplotlib inline
```



```
x="Species"
y="SepalLengthCm"

plt.plot(x,y,data=df,color=(255/255,100/255,100/255))
plt.xlabel="Species"
plt.ylabel="SepalLengthCm"
plt.show()
```

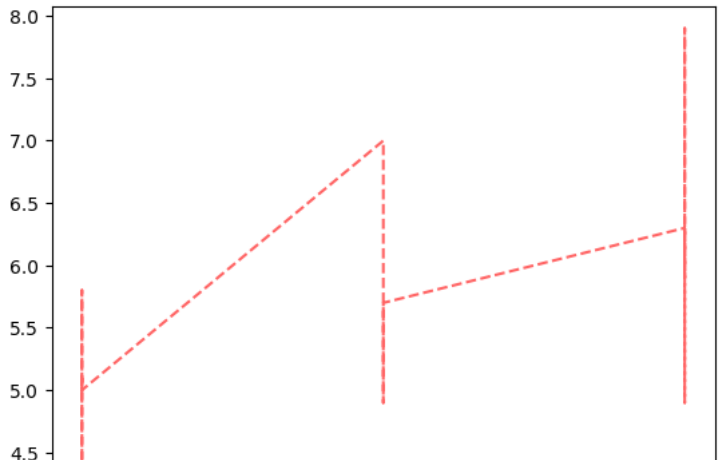


```
x = df["Species"]
y = df["SepalLengthCm"]

x2 = df["Species"]
y2 = df["PetalLengthCm"]

plt.plot(x, y, label='First Line')
plt.plot(x2, y2, label='Second Line')
plt.legend()
plt.show()
```

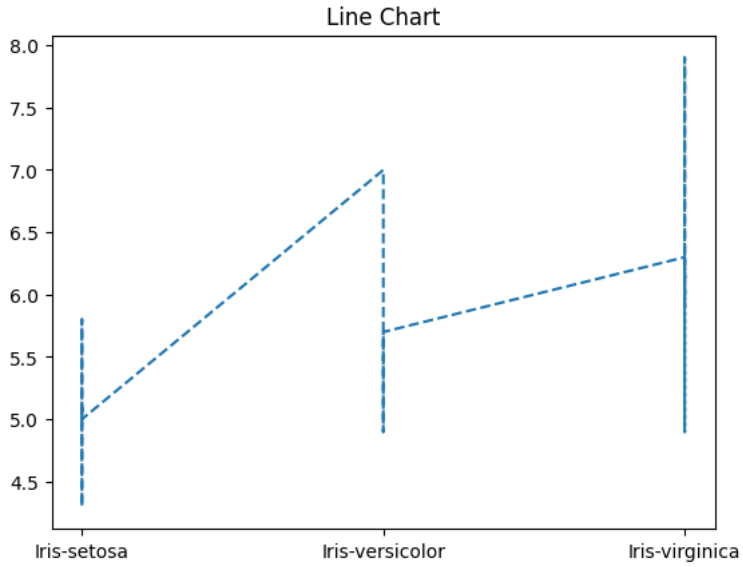



```
x="Species"
y="SepalLengthCm"
plt.plot(x,y,'--',color=(255/255,100/255,100/255),data=df)
```

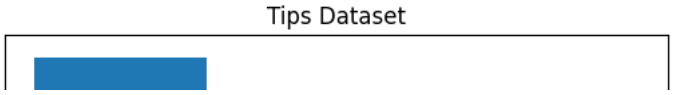
```
[<matplotlib.lines.Line2D at 0x7f1cb29277c0>]
```



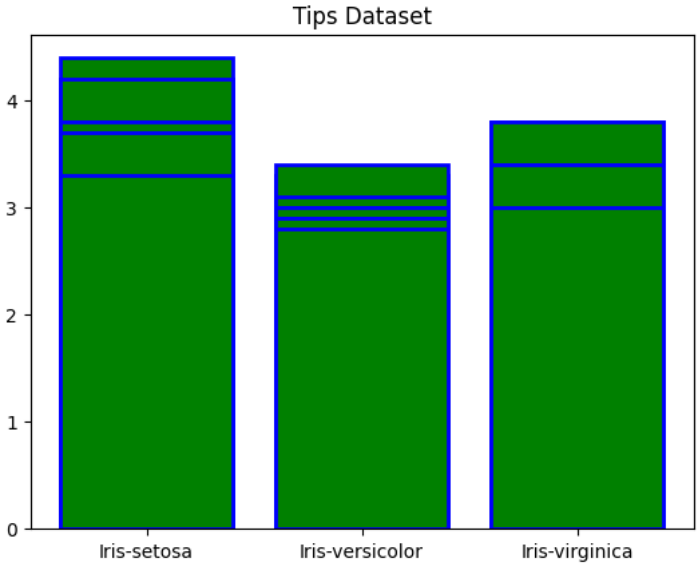

```
# initializing the data
x = df["Species"]
y = df["SepalLengthCm"]

# plotting the data
plt.plot(x, y, linestyle='--')

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

plt.show()
```



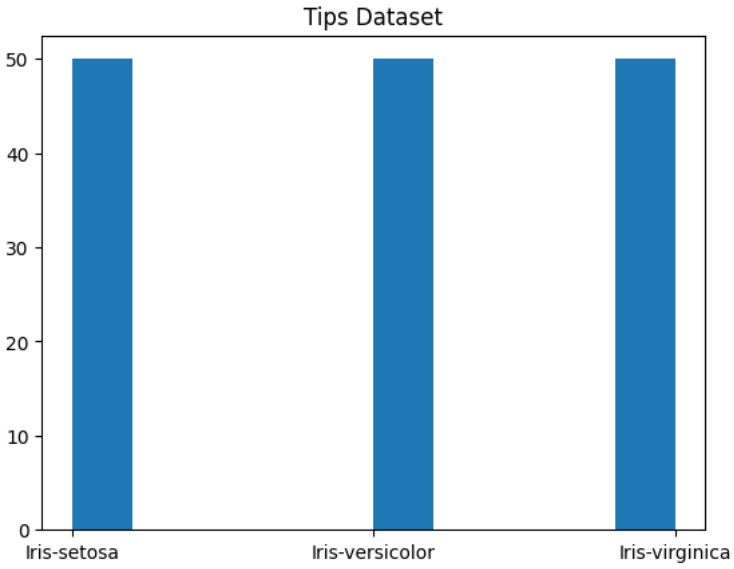

```
x = df["Species"]
y = df["SepalWidthCm"]
plt.bar(x, y)
plt.title("Tips Dataset")
plt.show()
```



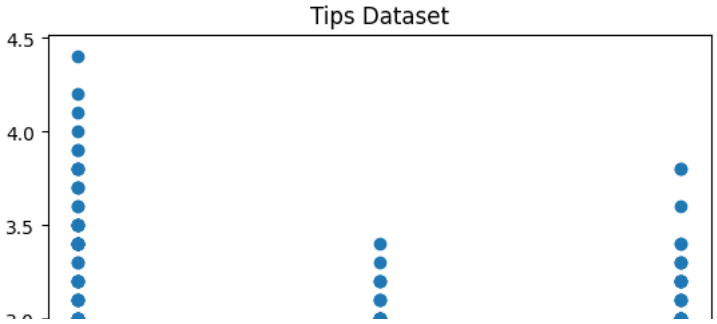

```
x = df["Species"]
y = df["SepalWidthCm"]
plt.bar(x, y, color='green', edgecolor='blue',
        linewidth=2)
plt.title("Tips Dataset")
plt.show()
```




```
x = df["Species"]
plt.hist(x)
plt.title("Tips Dataset")
plt.show()
```




```
x = df["Species"]
y = df["SepalWidthCm"]
plt.scatter(x, y)
plt.title("Tips Dataset")
plt.show()
```




```
cars = ['AUDI', 'BMW', 'FORD',
        'TESLA', 'JAGUAR',]
data = [23, 10, 35, 15, 12]

plt.pie(data, labels=cars)

plt.title("Car data")

plt.show()
```