

```
In [1]: %config Completer.use_jedi = False
```

```
In [2]: import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

```
In [3]: df = pd.read_csv('Iris.csv')
```

```
In [4]: df.describe()
```

Out[4]:

	Id	SepalLengthCm	SepalWidthCm	PetalLengthCm	PetalWidthCm
count	150.000000	150.000000	150.000000	150.000000	150.000000
mean	75.500000	5.843333	3.054000	3.758667	1.198667
std	43.445368	0.828066	0.433594	1.764420	0.763161
min	1.000000	4.300000	2.000000	1.000000	0.100000
25%	38.250000	5.100000	2.800000	1.600000	0.300000
50%	75.500000	5.800000	3.000000	4.350000	1.300000
75%	112.750000	6.400000	3.300000	5.100000	1.800000
max	150.000000	7.900000	4.400000	6.900000	2.500000

```
In [5]: df.groupby('Species').describe().round(2)
```

Out[5]:

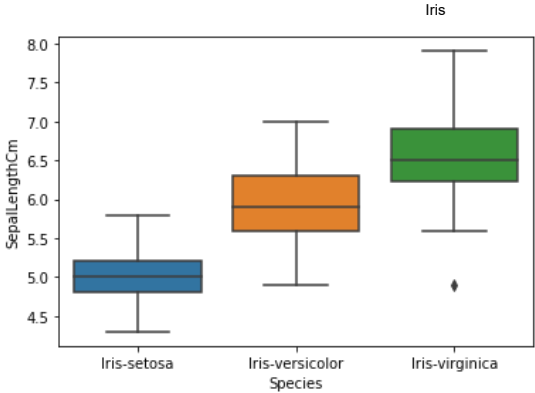
									Id	SepalLengthCm	...	PetalLength	
	count	mean	std	min	25%	50%	75%	max	count	mean	...	75%	n
Species													
Iris-setosa	50.0	25.5	14.58	1.0	13.25	25.5	37.75	50.0	50.0	5.01	...	1.58	
Iris-versicolor	50.0	75.5	14.58	51.0	63.25	75.5	87.75	100.0	50.0	5.94	...	4.60	
Iris-virginica	50.0	125.5	14.58	101.0	113.25	125.5	137.75	150.0	50.0	6.59	...	5.88	

3 rows × 40 columns

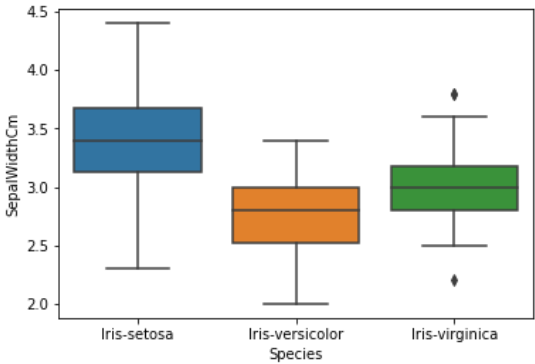


```
In [6]: def box_plot_species(df, column):
sns.boxplot(data=df, x='Species', y=column)
```

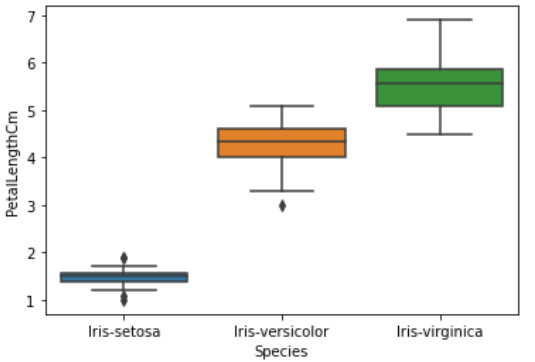
```
In [7]: box_plot_species(df, 'SepalLengthCm')
```



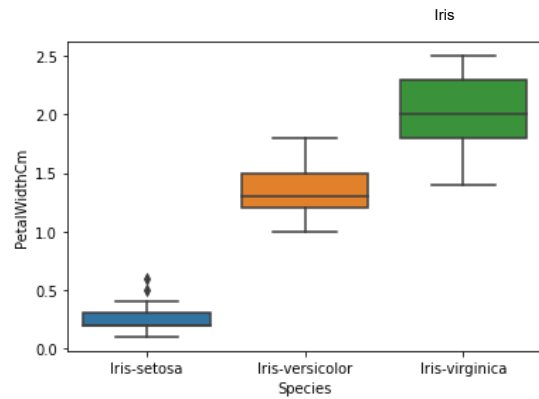
```
In [8]: box_plot_species(df, 'SepalWidthCm')
```



```
In [9]: box_plot_species(df, 'PetalLengthCm')
```

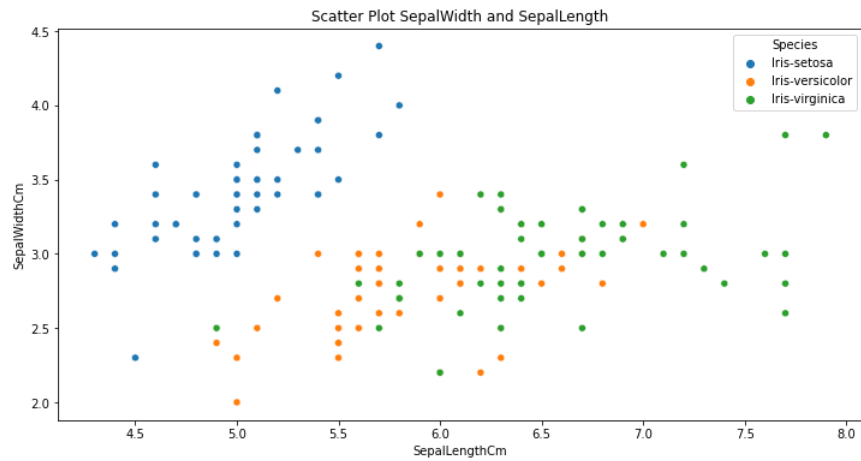


```
In [10]: box_plot_species(df, 'PetalWidthCm')
```



```
In [11]: f, ax = plt.subplots(figsize=(12,6))
a = sns.scatterplot(data=df, x='SepalLengthCm', y='SepalWidthCm', hue='Species', ax=
a.set_title('Scatter Plot SepalWidth and SepalLength')
```

Out[11]: Text(0.5, 1.0, 'Scatter Plot SepalWidth and SepalLength')



```
In [12]: f, ax = plt.subplots(figsize=(12,6))
b = sns.scatterplot(data=df, x='PetalLengthCm', y='PetalWidthCm', hue='Species', ax=
b.set_title('Scatter Plot PetalWidth and PetalLength');
```

