

Chapter 5 - Outlier Analysis

Segment 9 - Multivariate analysis for outlier detection

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

import matplotlib.pyplot as plt
from pylab import rcParams
import seaborn as sb
```

```
In [3]: %matplotlib inline
rcParams['figure.figsize'] = 5, 4
sb.set_style('whitegrid')
```

Visually inspecting boxplots

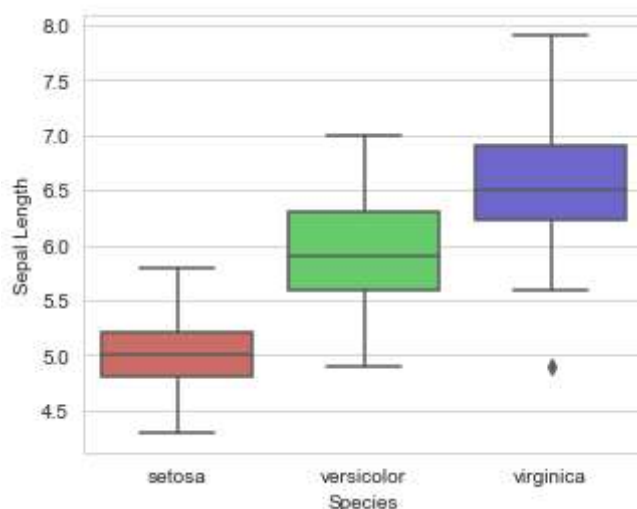
```
In [4]: df = pd.read_csv(filepath_or_buffer='C:/Users/danal/Desktop/ExerciseFiles/Data/iris.csv')
df.columns = ['Sepal Length', 'Sepal Width', 'Petal Length', 'Petal Width', 'Species']
```

```
In [5]: data = df.iloc[:,0:4].values
target = df.iloc[:,4].values

df[:5]

sb.boxplot(x='Species', y='Sepal Length', data=df, palette='hls')
```

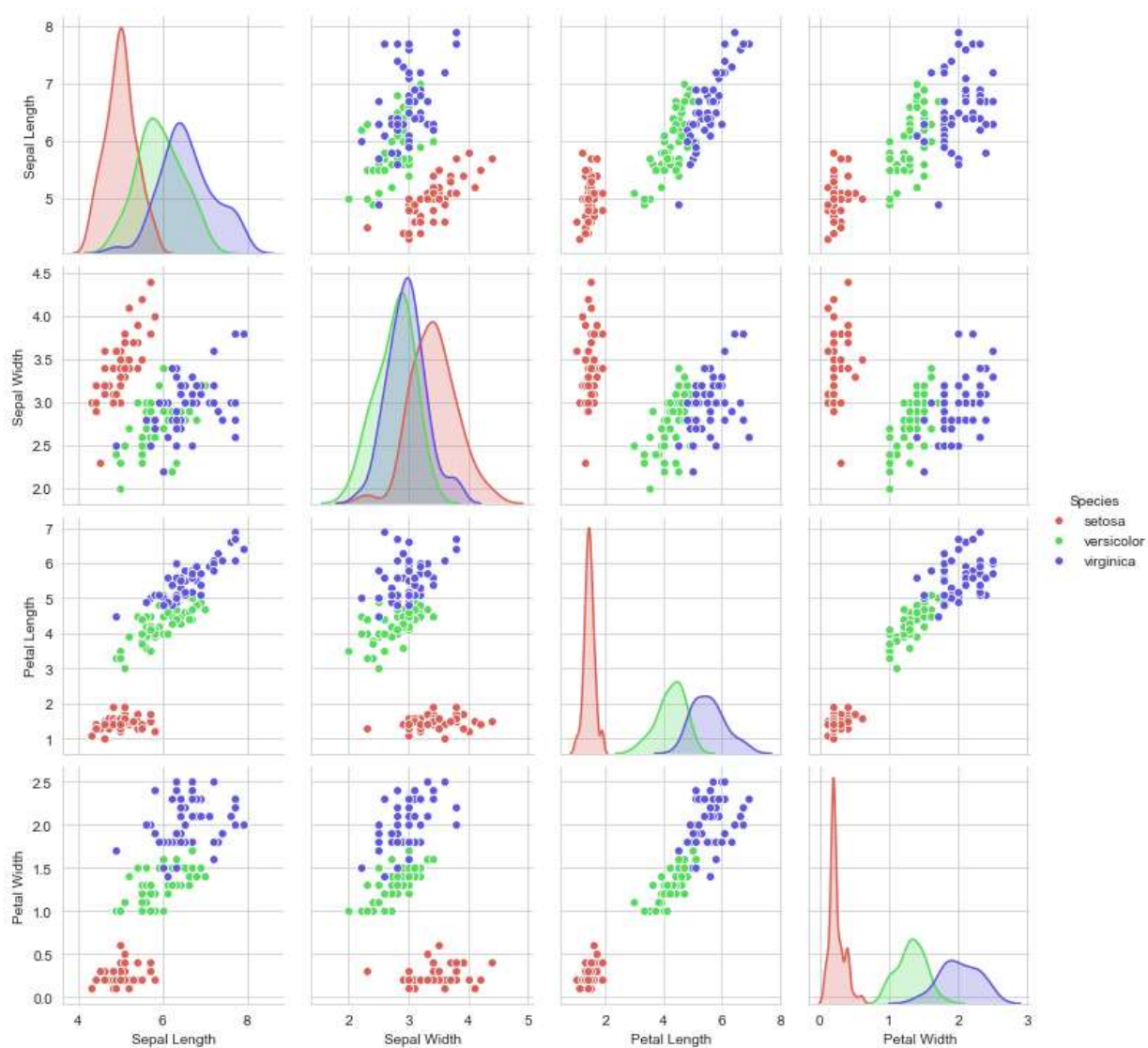
Out[5]: <matplotlib.axes._subplots.AxesSubplot at 0x2485a8722c8>



Looking at the scatterplot matrix

```
In [7]: sb.pairplot(df, hue='Species', palette='hls')
```

```
Out[7]: <seaborn.axisgrid.PairGrid at 0x2485c1e1e48>
```



```
In [ ]:
```