

Importing necessary libraries

```
In [ ]: import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sb
import warnings

warnings.filterwarnings("ignore")
```

Importing dataset

```
In [ ]: df = pd.read_csv("Dataset/iris.csv")
df.sample(7)
```

```
Out[ ]:
```

	Id	SepalLengthCm	SepalWidthCm	PetalLengthCm	PetalWidthCm	Species
133	134	6.3	2.8	5.1	1.5	Iris-virginica
121	122	5.6	2.8	4.9	2.0	Iris-virginica
19	20	5.1	3.8	1.5	0.3	Iris-setosa
57	58	4.9	2.4	3.3	1.0	Iris-versicolor
54	55	6.5	2.8	4.6	1.5	Iris-versicolor
142	143	5.8	2.7	5.1	1.9	Iris-virginica
34	35	4.9	3.1	1.5	0.1	Iris-setosa

Dataset Info

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

```
Out[ ]:
```

	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

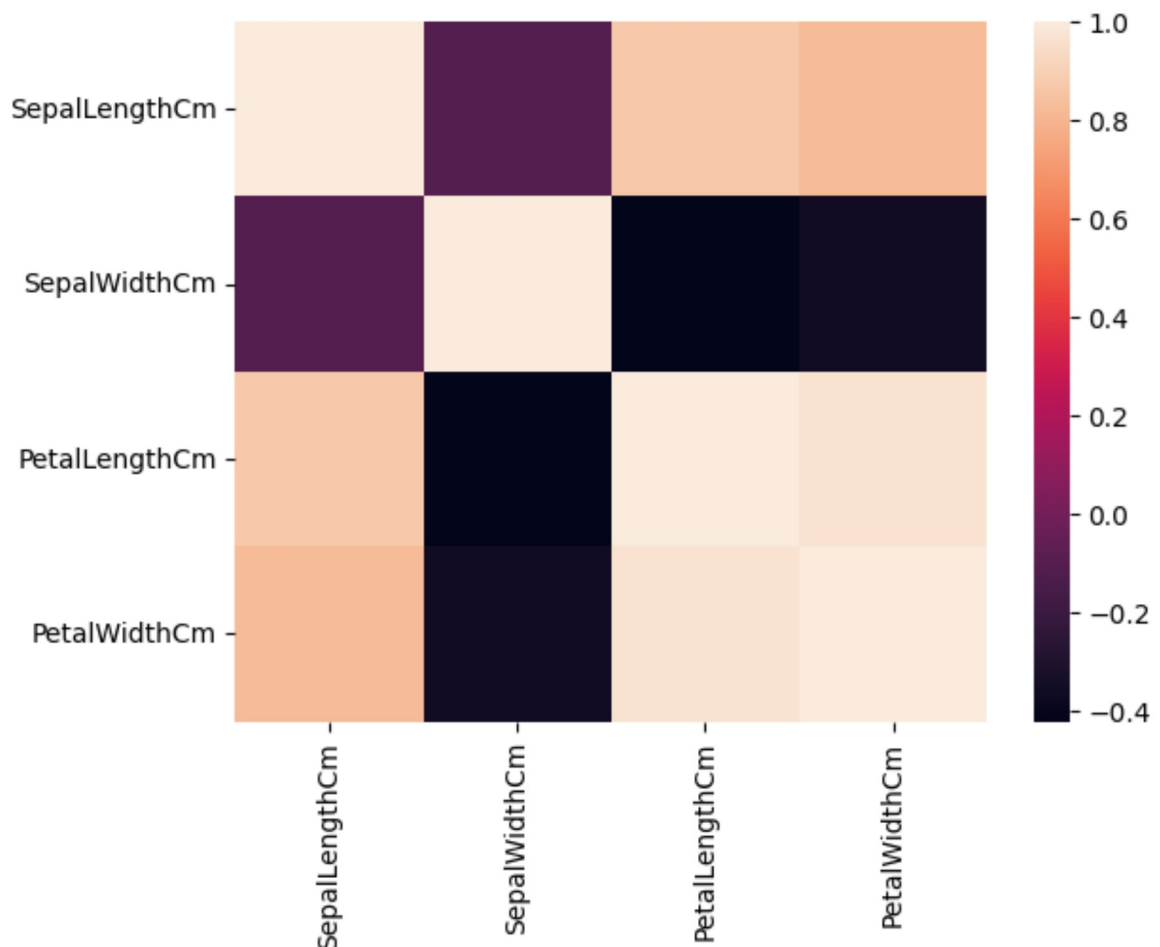
```
In [ ]: data = df.drop(columns=["Id", "Species"])
```

Heatmap

```
In [ ]: corr = data.corr()  
cov = data.cov()
```

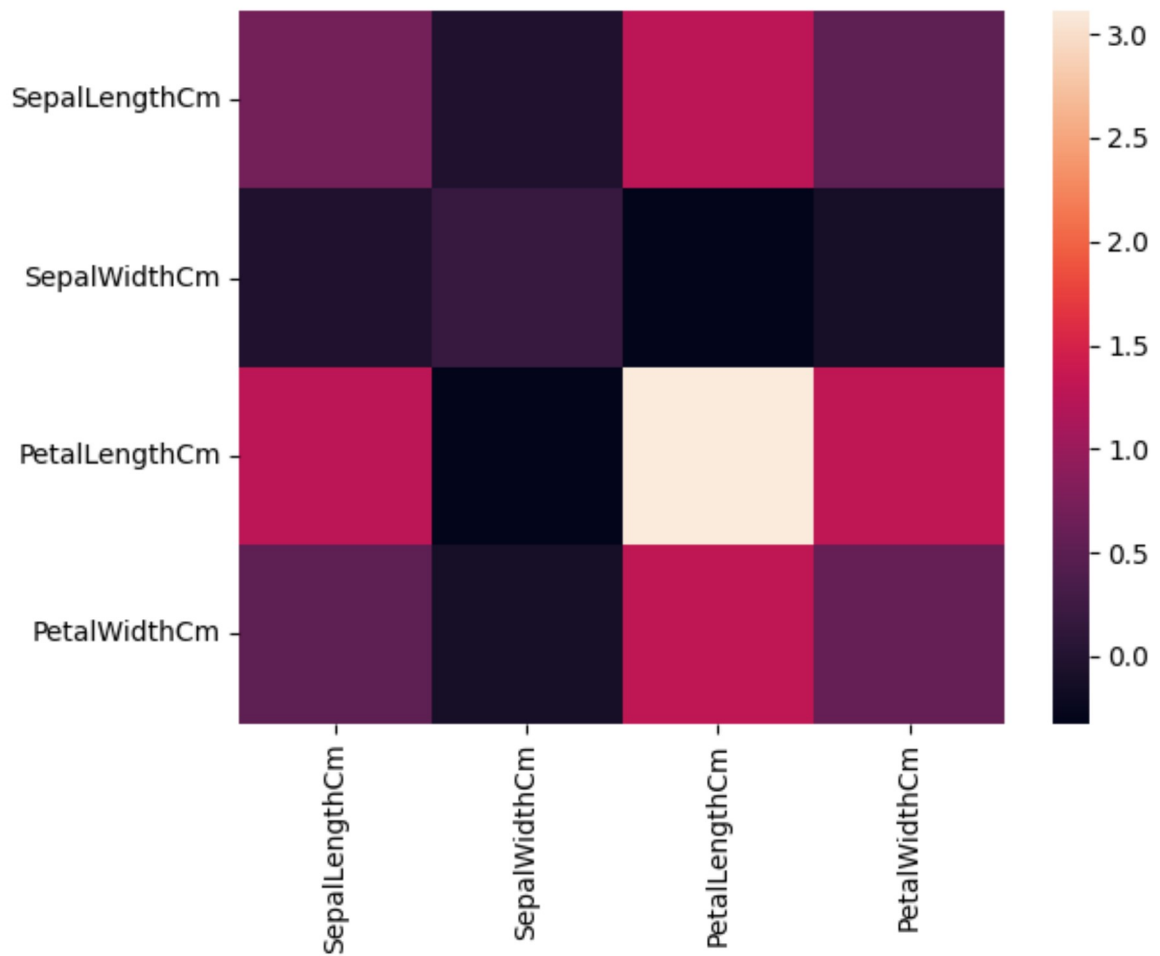
```
In [ ]: sb.heatmap(corr)
```

```
Out[ ]: <Axes: >
```



```
In [ ]: sb.heatmap(cov)
```

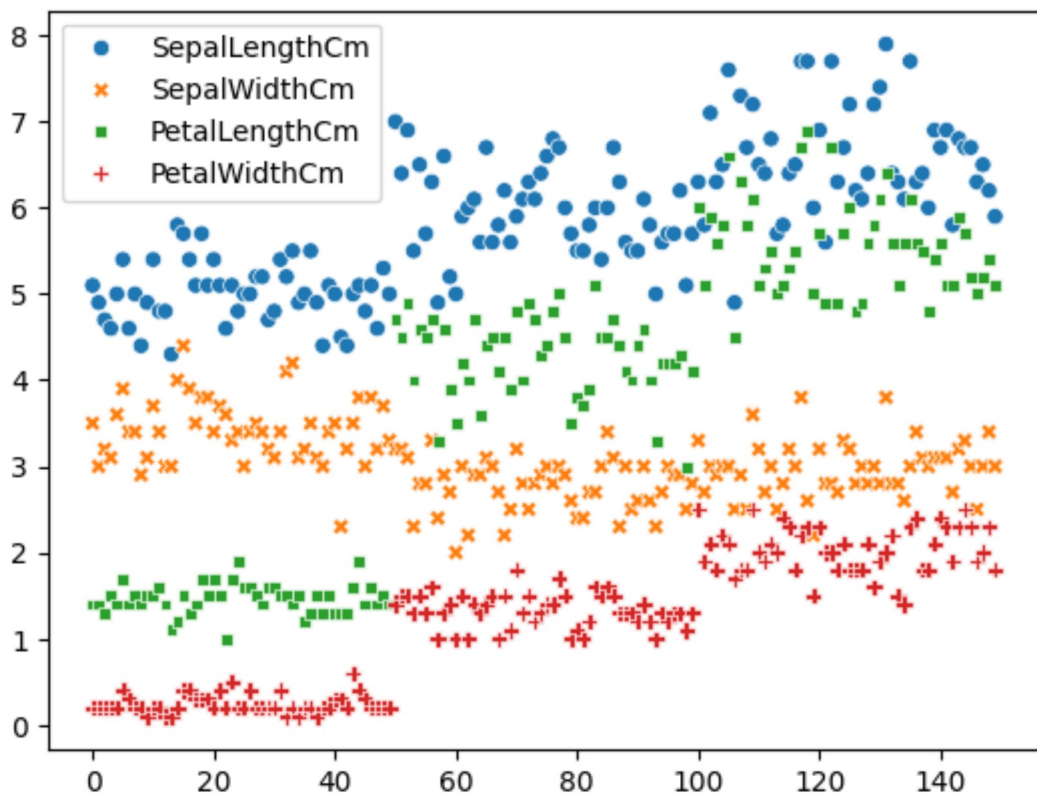
```
Out[ ]: <Axes: >
```



Scatterplot

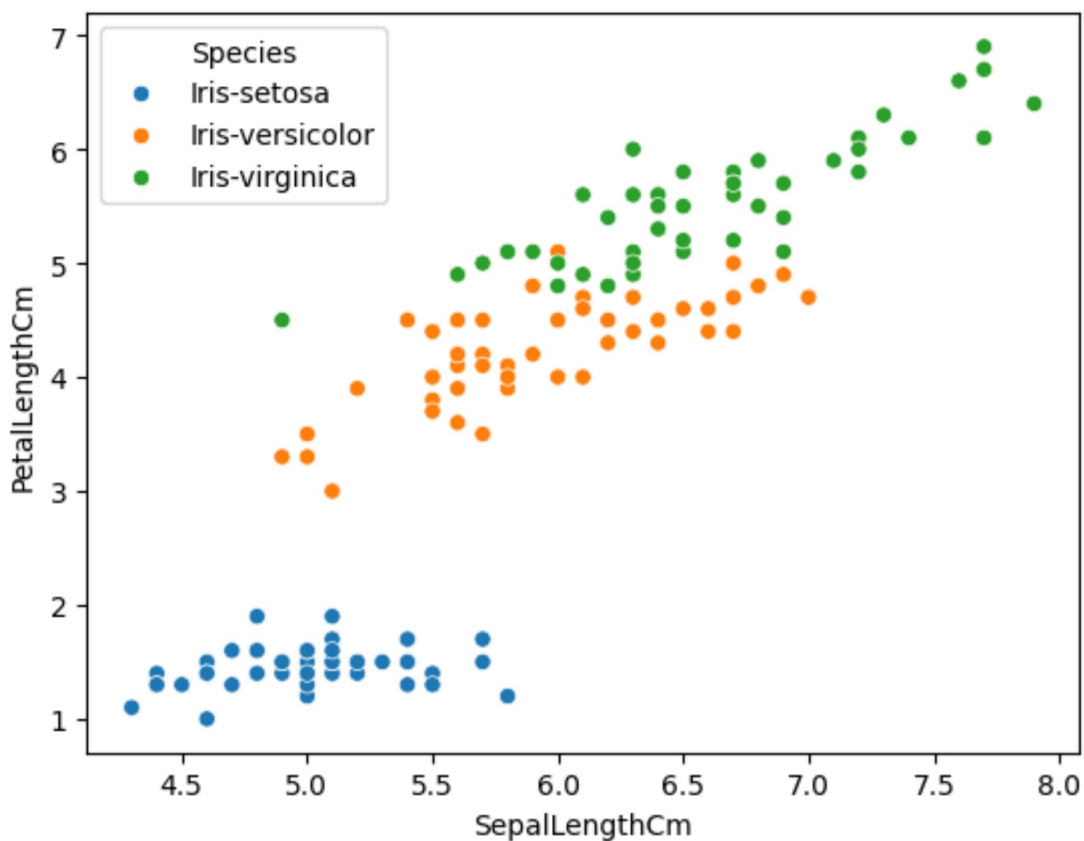
```
In [ ]: sb.scatterplot(data)
```

```
Out[ ]: <Axes: >
```



```
In [ ]: sb.scatterplot(df, x="SepalLengthCm", y="PetalLengthCm", hue="Species")
```

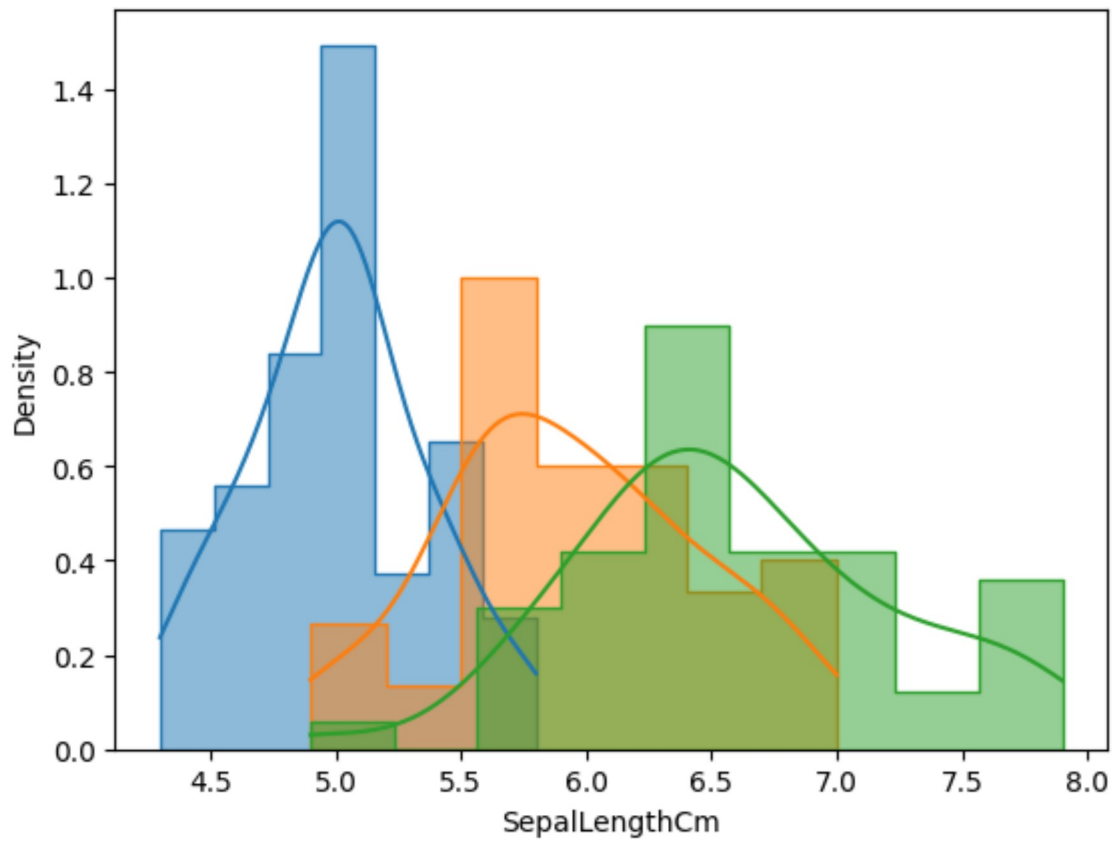
```
Out[ ]: <Axes: xlabel='SepalLengthCm', ylabel='PetalLengthCm'>
```



Distribution of petal length of iris virginica

```
In [ ]: species = df['Species'].unique()  
for specie in species:
```

```
subset = df[df['Species'] == specie]
sb.histplot(subset['SepalLengthCm'], kde=True, label=specie, element='step',
```



Catplot

```
In [ ]: sb.catplot(data)
```

```
Out[ ]: <seaborn.axisgrid.FacetGrid at 0x264b6514e50>
```

