

Import Necessary Libraries

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

Import Dataset

```
In [ ]: dataset = pd.read_csv('iris.csv')
dataset.head()
```

```
Out[ ]:   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
```

Analyse Dataset

```
In [ ]: dataset.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 150 entries, 0 to 149
Data columns (total 6 columns):
 #   Column      Non-Null Count  Dtype  
--- 
 0   Id          150 non-null    int64  
 1   SepalLengthCm 150 non-null   float64 
 2   SepalWidthCm  150 non-null   float64 
 3   PetalLengthCm 150 non-null   float64 
 4   PetalWidthCm  150 non-null   float64 
 5   Species      150 non-null   object  
dtypes: float64(4), int64(1), object(1)
memory usage: 7.2+ KB
```

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

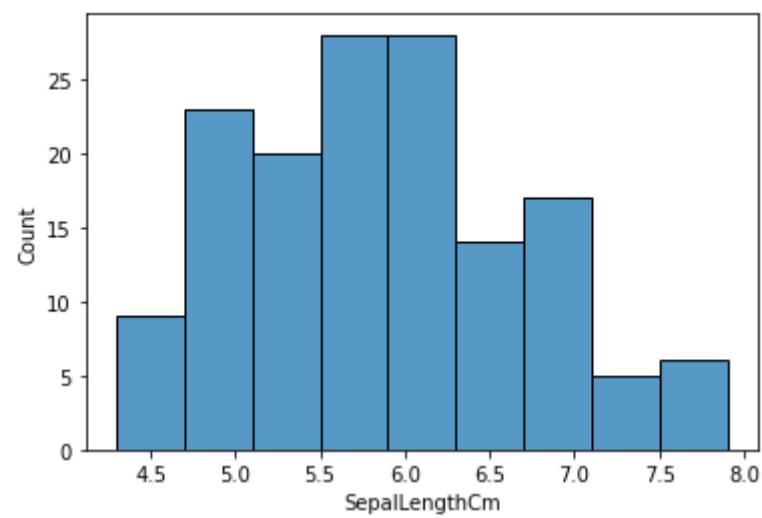
```
Out[ ]:   Id SepalLengthCm SepalWidthCm PetalLengthCm PetalWidthCm
count  150.000000  150.000000  150.000000  150.000000  150.000000
mean   75.500000  5.843333   3.054000   3.758667   1.198667
std    43.445368  0.828066   0.433594   1.764420   0.763161
min    1.000000  4.300000   2.000000   1.000000   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 [ ]: dataset.dtypes
```

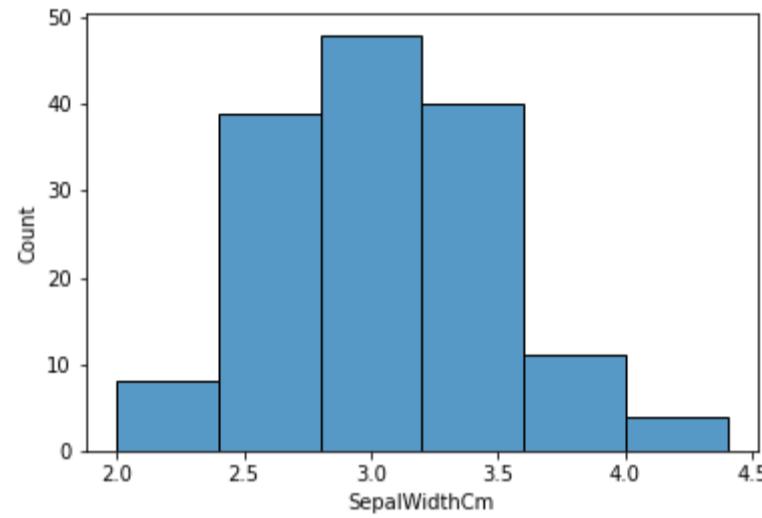
```
Out[ ]: Id          int64
SepalLengthCm  float64
SepalWidthCm   float64
PetalLengthCm  float64
PetalWidthCm   float64
Species       object
dtype: object
```

Histogram

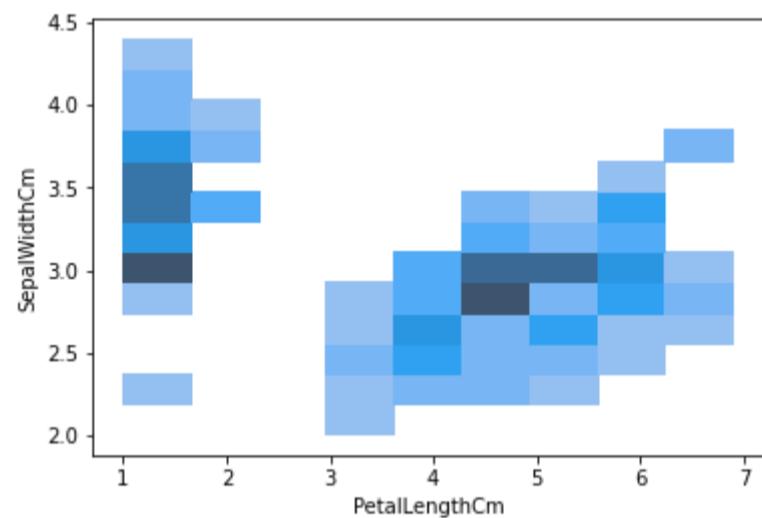
```
In [ ]: sns.histplot(dataset['SepalLengthCm'])
plt.show()
```



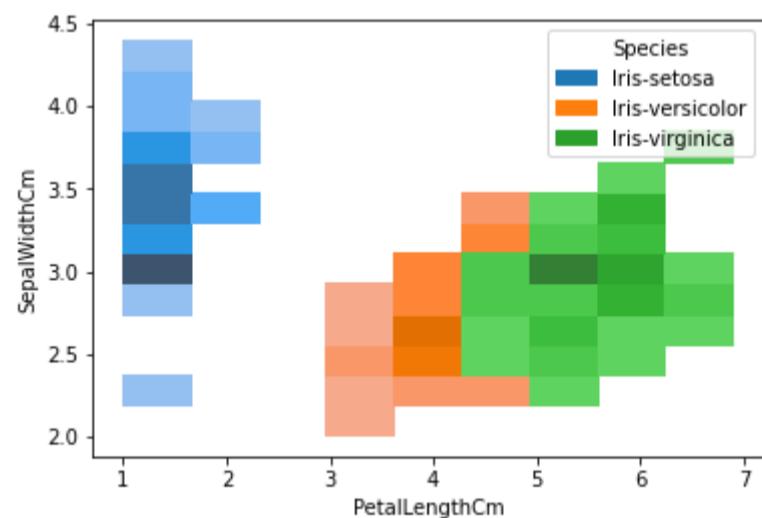
```
In [ ]: sns.histplot(dataset['SepalWidthCm'], bins=6)  
plt.show()
```



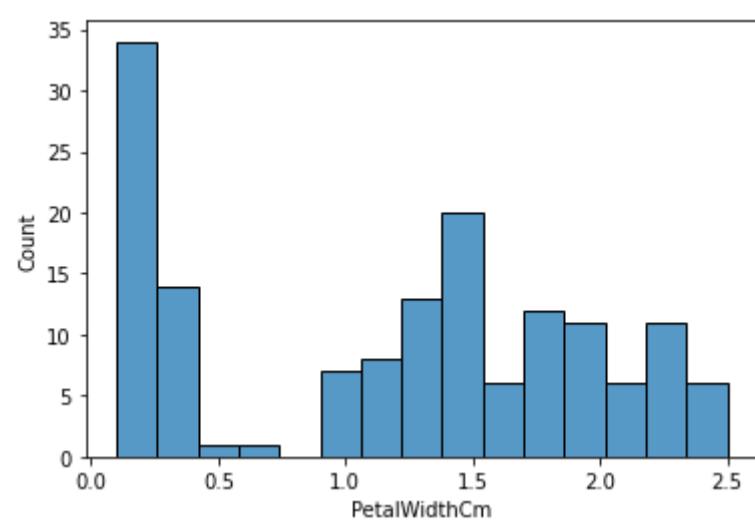
```
In [ ]: sns.histplot(data=dataset, x='PetalLengthCm', y='SepalWidthCm')  
plt.show()
```



```
In [ ]: sns.histplot(data=dataset, x='PetalLengthCm', y='SepalWidthCm', hue='Species')  
plt.show()
```

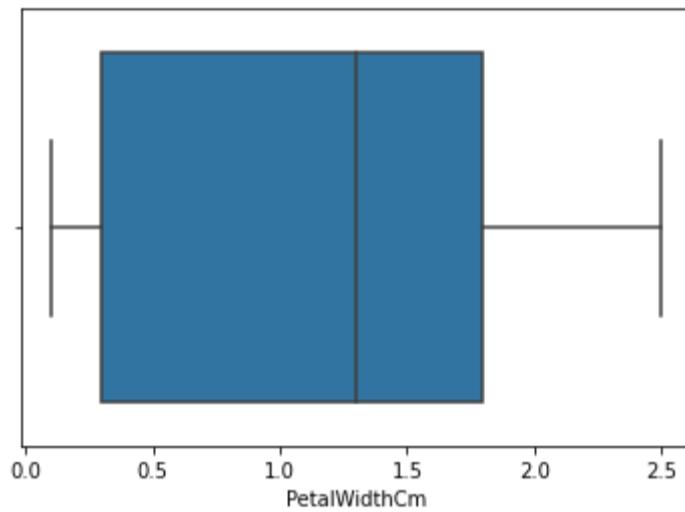


```
In [ ]: sns.histplot(dataset['PetalWidthCm'], bins=15)  
plt.show()
```

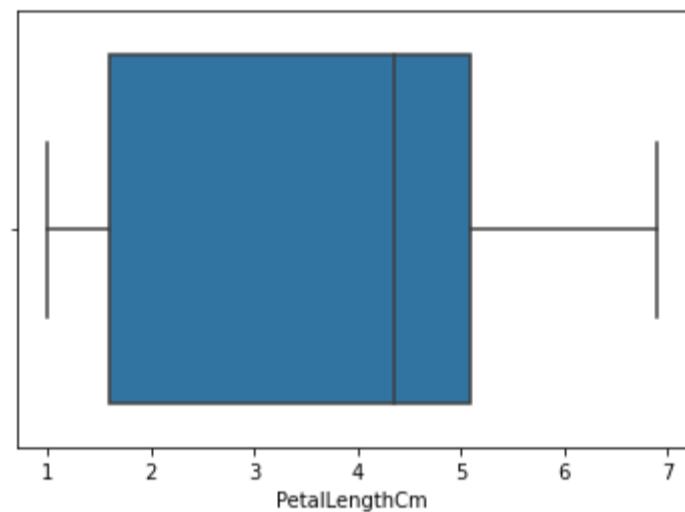


Boxplot

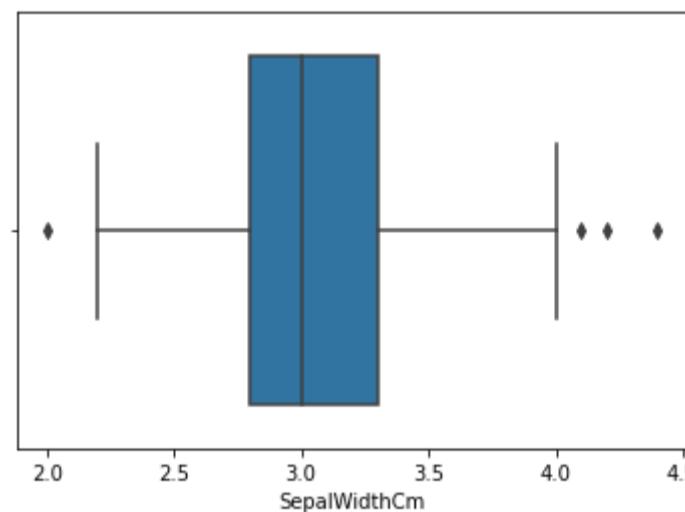
```
In [ ]: sns.boxplot(data=dataset, x='PetalWidthCm')  
plt.show()
```



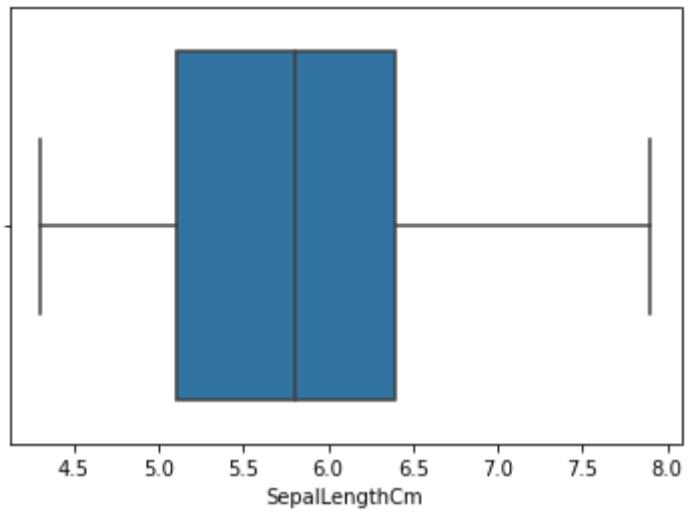
```
In [ ]: sns.boxplot(data=dataset, x='PetalLengthCm')  
plt.show()
```



```
In [ ]: sns.boxplot(data=dataset, x='SepalWidthCm')  
plt.show()
```



```
In [ ]: sns.boxplot(data=dataset, x='SepalLengthCm')  
plt.show()
```



```
In [ ]: sns.boxplot(data=dataset, x='SepalLengthCm', y='SepalWidthCm')
plt.show()
```

