

```
In [1]: import pandas as pd
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt
```

```
In [2]: df = pd.read_csv("Iris.csv")
```

```
In [3]: df.head()
```

```
Out[3]:
```

	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

```
In [4]: df.dtypes
```

```
Out[4]: Id                int64
SepalLengthCm          float64
SepalWidthCm           float64
PetalLengthCm          float64
PetalWidthCm           float64
Species                object
dtype: object
```

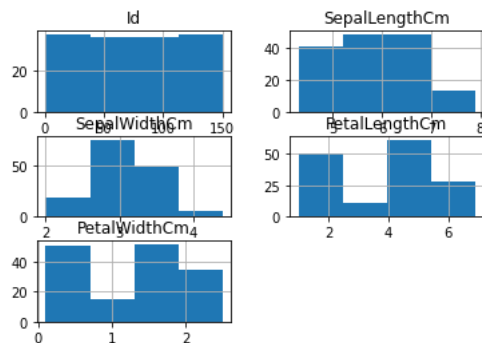
```
In [5]: df.describe()
```

```
Out[5]:
```

	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

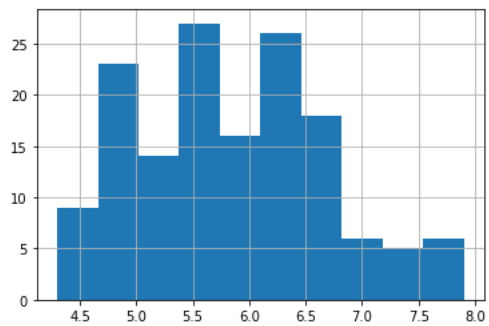
```
In [6]: df.hist(bins=4)
```

```
Out[6]: array([[<AxesSubplot:title={'center':'Id'}>,
<AxesSubplot:title={'center':'SepalLengthCm'}>],
[<AxesSubplot:title={'center':'SepalWidthCm'}>,
<AxesSubplot:title={'center':'PetalLengthCm'}>],
[<AxesSubplot:title={'center':'PetalWidthCm'}>, <AxesSubplot:>]],
dtype=object)
```



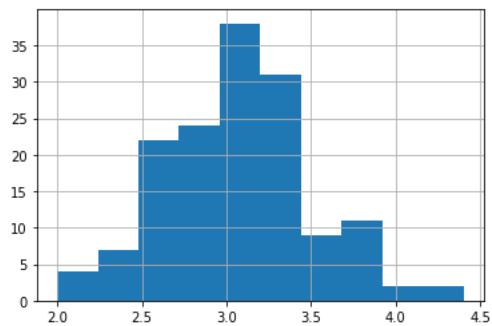
```
In [7]: df['SepalLengthCm'].hist()
```

```
Out[7]: <AxesSubplot:>
```



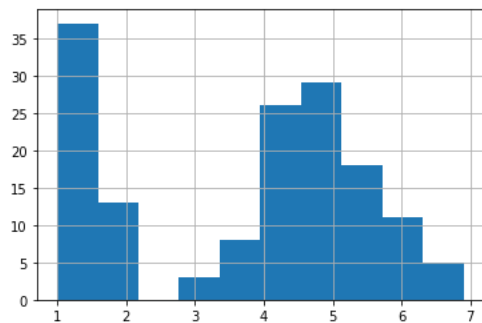
```
In [8]: df['SepalWidthCm'].hist()
```

```
Out[8]: <AxesSubplot:>
```



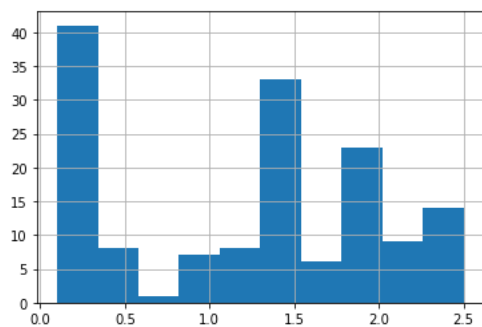
```
In [9]: df['PetalLengthCm'].hist()
```

```
Out[9]: <AxesSubplot:>
```



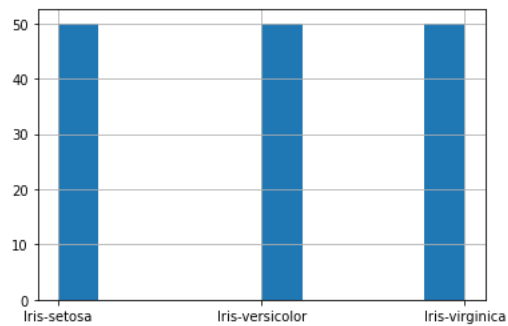
```
In [11]: df['PetalWidthCm'].hist()
```

```
Out[11]: <AxesSubplot:>
```



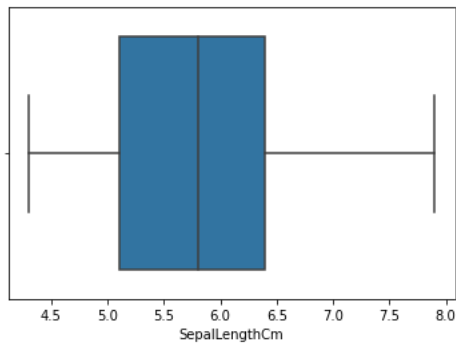
```
In [12]: df['Species'].hist()
```

```
Out[12]: <AxesSubplot:>
```



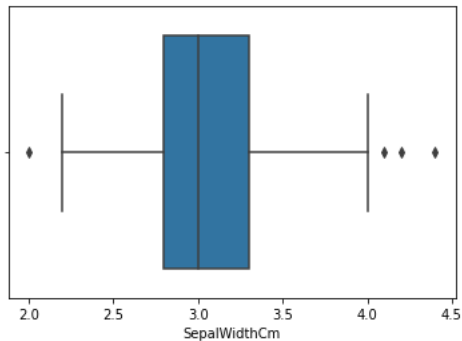
```
In [13]: sns.boxplot(data = df, x="SepalLengthCm")
```

```
Out[13]: <AxesSubplot:xlabel='SepalLengthCm'>
```



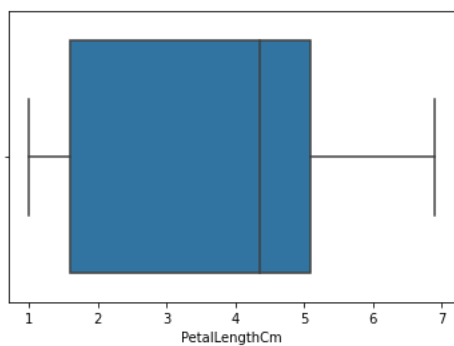
```
In [14]: sns.boxplot(data=df, x="SepalWidthCm")
```

```
Out[14]: <AxesSubplot:xlabel='SepalWidthCm'>
```



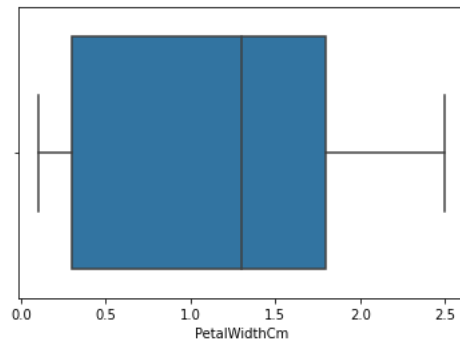
```
In [15]: sns.boxplot(data=df, x="PetalLengthCm")
```

```
Out[15]: <AxesSubplot:xlabel='PetalLengthCm'>
```



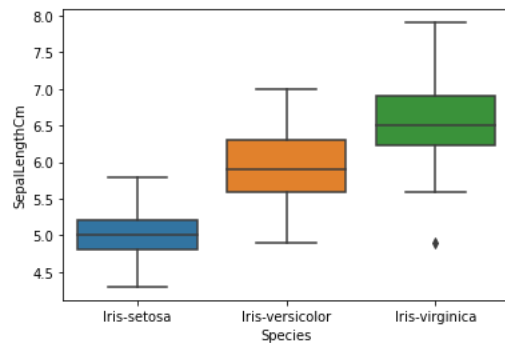
```
In [16]: sns.boxplot(data=df,x="PetalWidthCm")
```

```
Out[16]: <AxesSubplot:xlabel='PetalWidthCm'>
```



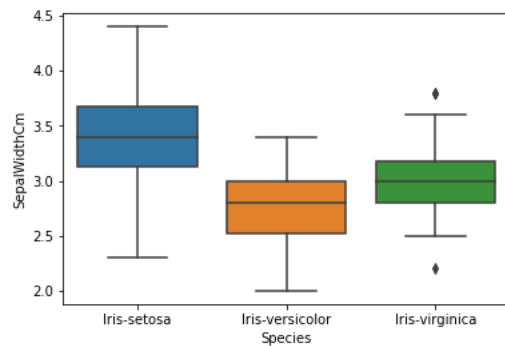
```
In [17]: sns.boxplot(data=df,x="Species",y="SepalLengthCm")
```

```
Out[17]: <AxesSubplot:xlabel='Species', ylabel='SepalLengthCm'>
```



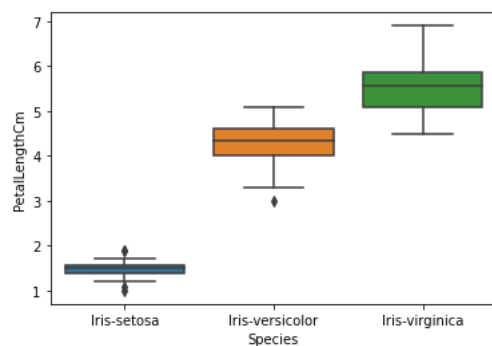
```
In [18]: sns.boxplot(data=df,x="Species",y="SepalWidthCm")
```

```
Out[18]: <AxesSubplot:xlabel='Species', ylabel='SepalWidthCm'>
```



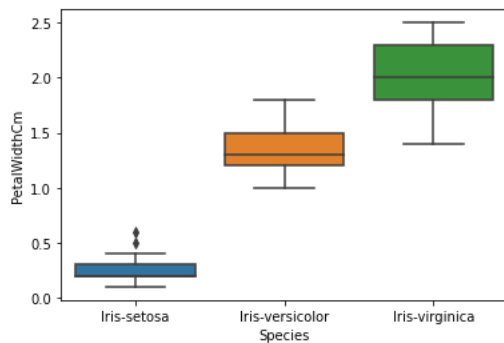
```
In [20]: sns.boxplot(data=df, x="Species",y="PetalLengthCm")
```

```
Out[20]: <AxesSubplot:xlabel='Species', ylabel='PetalLengthCm'>
```



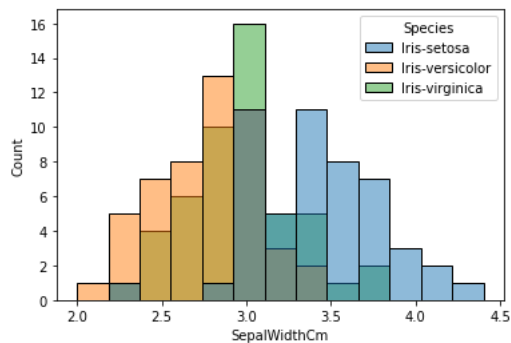
```
In [21]: sns.boxplot(data=df, x="Species", y="PetalWidthCm")
```

```
Out[21]: <AxesSubplot:xlabel='Species', ylabel='PetalWidthCm'>
```



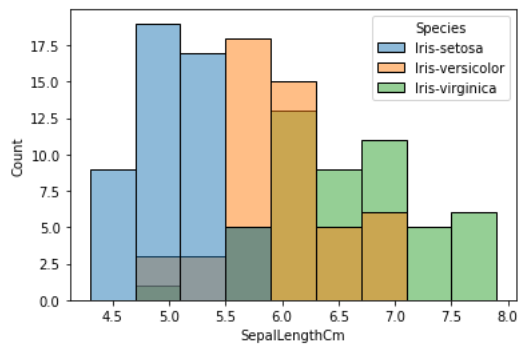
```
In [23]: sns.histplot(data=df, x="SepalWidthCm", hue="Species")
```

```
Out[23]: <AxesSubplot:xlabel='SepalWidthCm', ylabel='Count'>
```



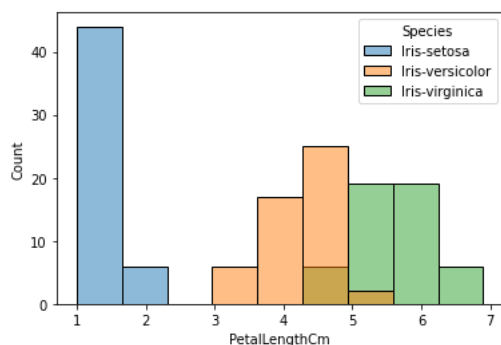
```
In [26]: sns.histplot(data=df, x="SepalLengthCm", hue="Species")
```

```
Out[26]: <AxesSubplot:xlabel='SepalLengthCm', ylabel='Count'>
```



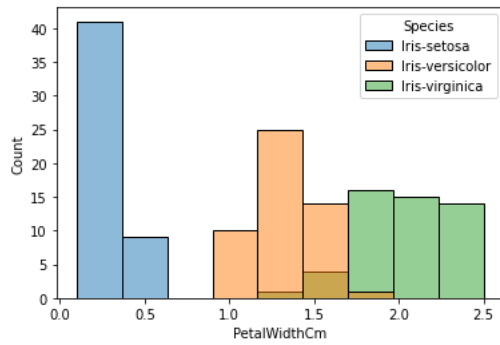
```
In [27]: sns.histplot(data=df, x="PetalLengthCm", hue="Species")
```

```
Out[27]: <AxesSubplot:xlabel='PetalLengthCm', ylabel='Count'>
```



```
In [28]: sns.histplot(data=df, x="PetalWidthCm", hue="Species")
```

```
Out[28]: <AxesSubplot:xlabel='PetalWidthCm', ylabel='Count'>
```



```
In [ ]:
```