In [1]:

```
import pandas as pd
import numpy as ny
import seaborn as sns
```

In [2]:

```
data = pd.read_csv('Iris.csv')
```

In [3]:

```
data.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]:

```
data.isnull().sum()
```

Out[4]:

```
Id               0
SepalLengthCm    0
SepalWidthCm     0
PetalLengthCm    0
PetalWidthCm     0
Species          0
dtype: int64
```

In [5]:

```
data.info
```

Out[5]:

```
<bound method DataFrame.info of       Id  SepalLengthCm  SepalWidthCm
PetalLengthCm  PetalWidthCm  \
0      1            5.1           3.5            1.4           0.2
1      2            4.9           3.0            1.4           0.2
2      3            4.7           3.2            1.3           0.2
3      4            4.6           3.1            1.5           0.2
4      5            5.0           3.6            1.4           0.2
..   ...            ...           ...            ...           ...
145  146            6.7           3.0            5.2           2.3
146  147            6.3           2.5            5.0           1.9
147  148            6.5           3.0            5.2           2.0
148  149            6.2           3.4            5.4           2.3
149  150            5.9           3.0            5.1           1.8

            Species
0       Iris-setosa
1       Iris-setosa
2       Iris-setosa
3       Iris-setosa
4       Iris-setosa
..              ...
145  Iris-virginica
146  Iris-virginica
147  Iris-virginica
148  Iris-virginica
149  Iris-virginica

[150 rows x 6 columns]>
```

In [6]:

```
data
```

Out[6]:

	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
...	...	...	...	...	...	...
145	146	6.7	3.0	5.2	2.3	Iris-virginica
146	147	6.3	2.5	5.0	1.9	Iris-virginica
147	148	6.5	3.0	5.2	2.0	Iris-virginica
148	149	6.2	3.4	5.4	2.3	Iris-virginica
149	150	5.9	3.0	5.1	1.8	Iris-virginica

150 rows × 6 columns

In [7]:

```
print("The feature in Iris dataset is: ")
print("SepalLengthCm : ", data['SepalLengthCm'].dtype)
print("PetalLengthCm : ", data['PetalLengthCm'].dtype)
print("SepalWidthCm : ", data['SepalWidthCm'].dtype)
print("PetalWidthCm : ", data['PetalWidthCm'].dtype)
print("Species : ", data['Species'].dtype)
```

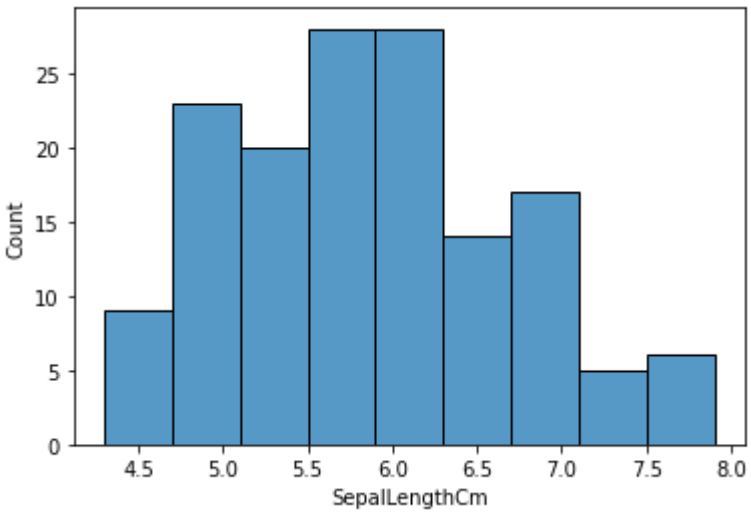
```
The feature in Iris dataset is:
SepalLengthCm :  float64
PetalLengthCm :  float64
SepalWidthCm :  float64
PetalWidthCm :  float64
Species :  object
```

In [8]:

```
sns.histplot(x = data['SepalLengthCm'])
```

Out[8]:

```
<AxesSubplot:xlabel='SepalLengthCm', ylabel='Count'>
```

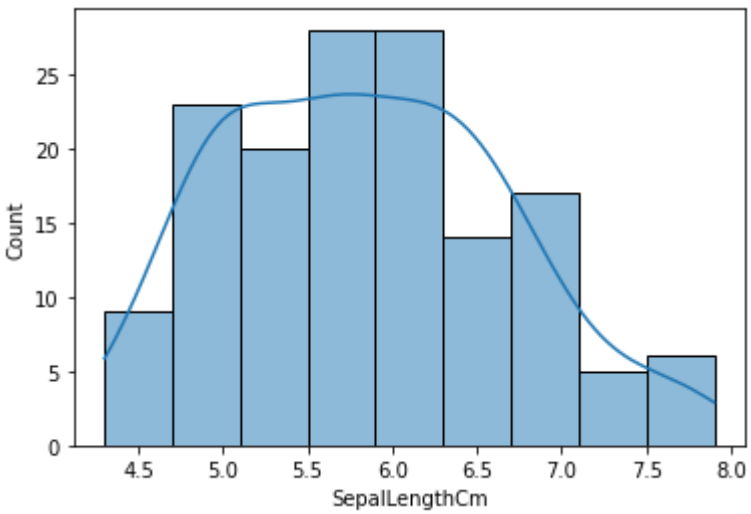


In [9]:

```
sns.histplot(x = data['SepalLengthCm'],kde='true')
```

Out[9]:

```
<AxesSubplot:xlabel='SepalLengthCm', ylabel='Count'>
```

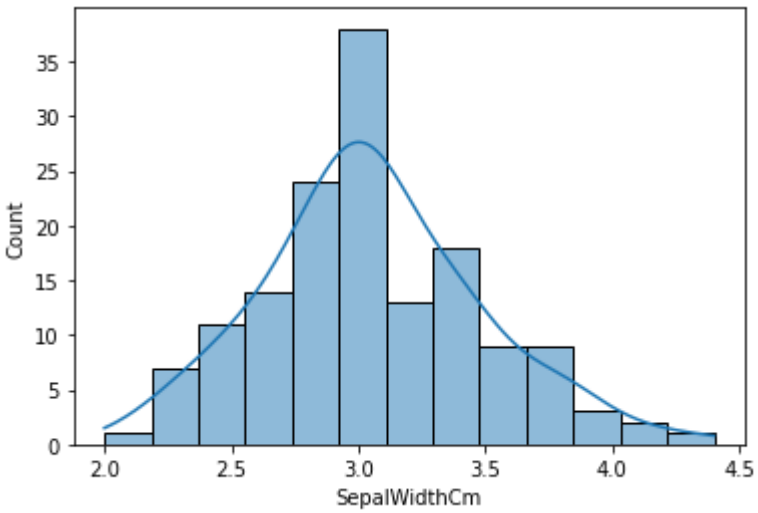


In [10]:

```
sns.histplot(x = data['SepalWidthCm'],kde='true')
```

Out[10]:

```
<AxesSubplot:xlabel='SepalWidthCm', ylabel='Count'>
```

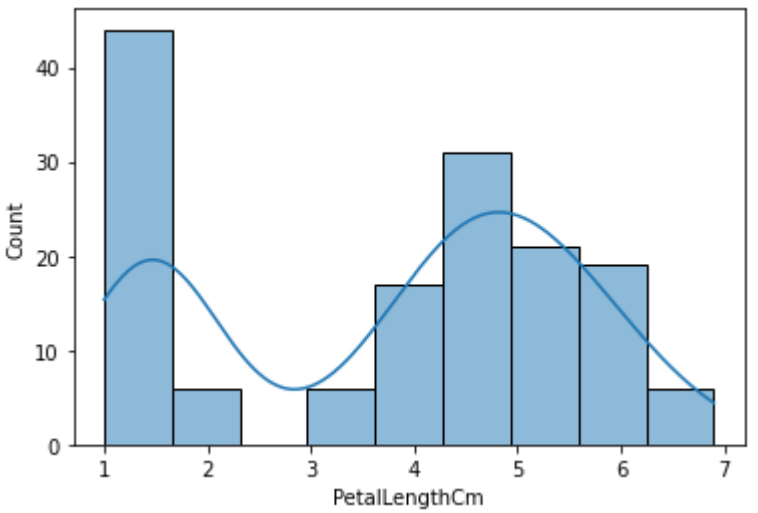


In [11]:

```
sns.histplot(x = data['PetalLengthCm'],kde='true')
```

Out[11]:

```
<AxesSubplot:xlabel='PetalLengthCm', ylabel='Count'>
```

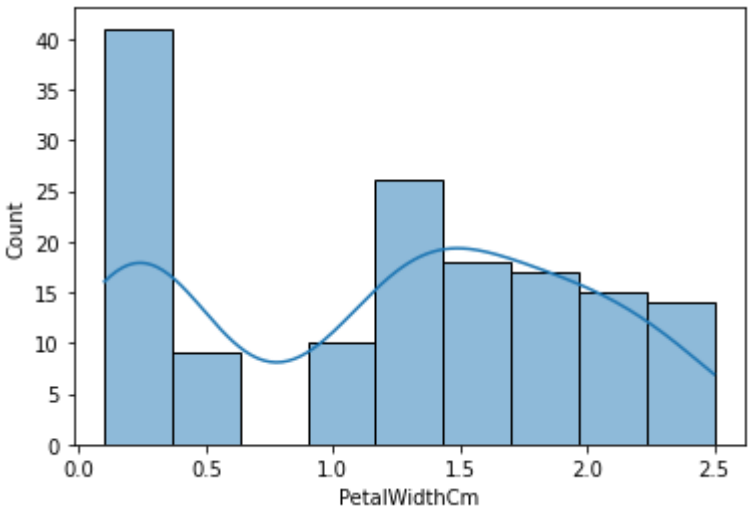


In [12]:

```
sns.histplot(x = data['PetalWidthCm'],kde='true')
```

Out[12]:

<AxesSubplot:xlabel='PetalWidthCm', ylabel='Count'>

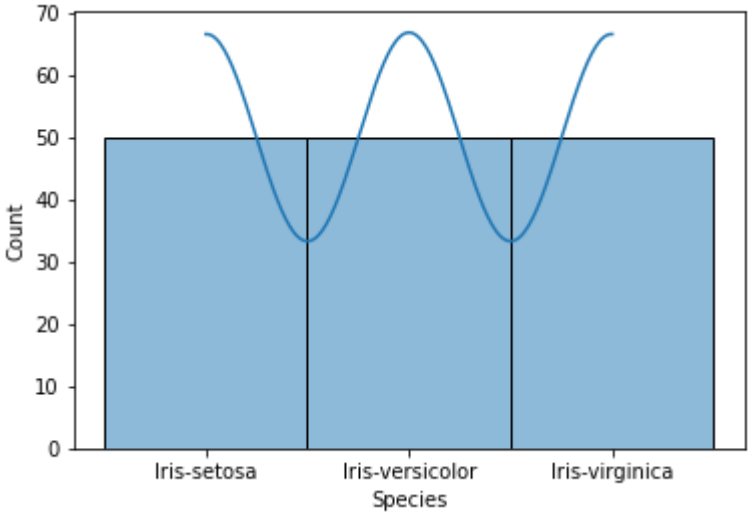


In [13]:

```
sns.histplot(x = data['Species'],kde='true')
```

Out[13]:

<AxesSubplot:xlabel='Species', ylabel='Count'>

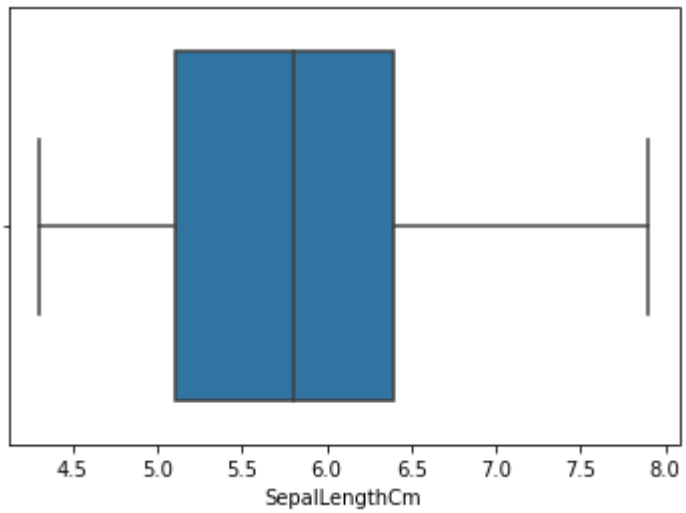


In [14]:

```
sns.boxplot(x=data['SepalLengthCm'])
```

Out[14]:

```
<AxesSubplot:xlabel='SepalLengthCm'>
```

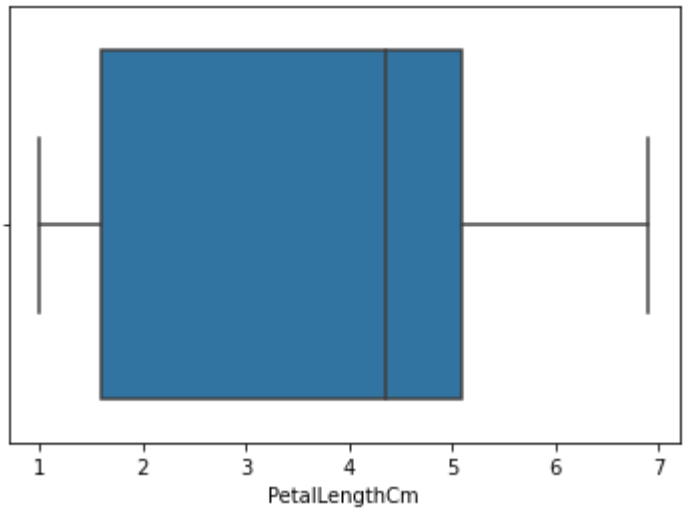


In [15]:

```
sns.boxplot(x=data['PetalLengthCm'])
```

Out[15]:

```
<AxesSubplot:xlabel='PetalLengthCm'>
```

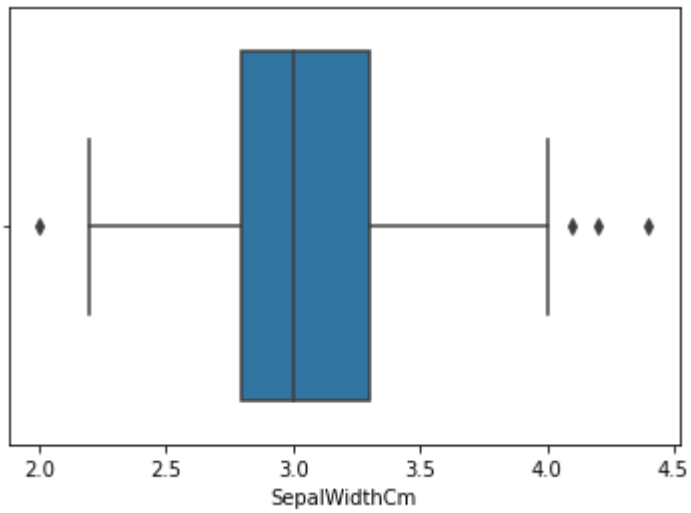


In [16]:

```
sns.boxplot(x=data['SepalWidthCm'])
```

Out[16]:

<AxesSubplot:xlabel='SepalWidthCm'>

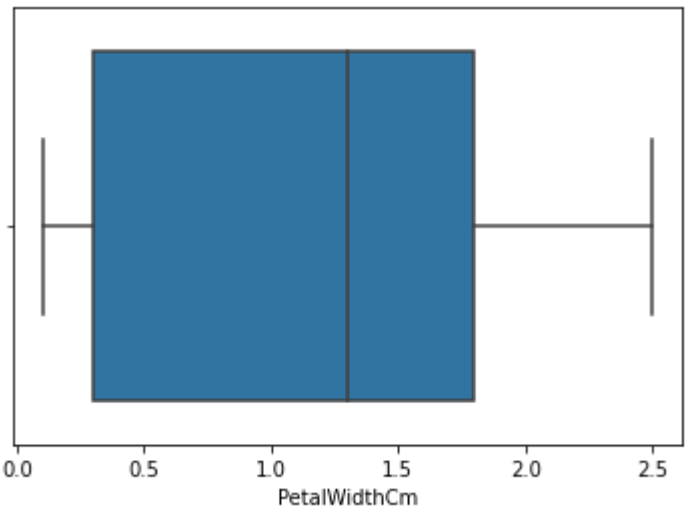


In [17]:

```
sns.boxplot(x=data['PetalWidthCm'])
```

Out[17]:

<AxesSubplot:xlabel='PetalWidthCm'>

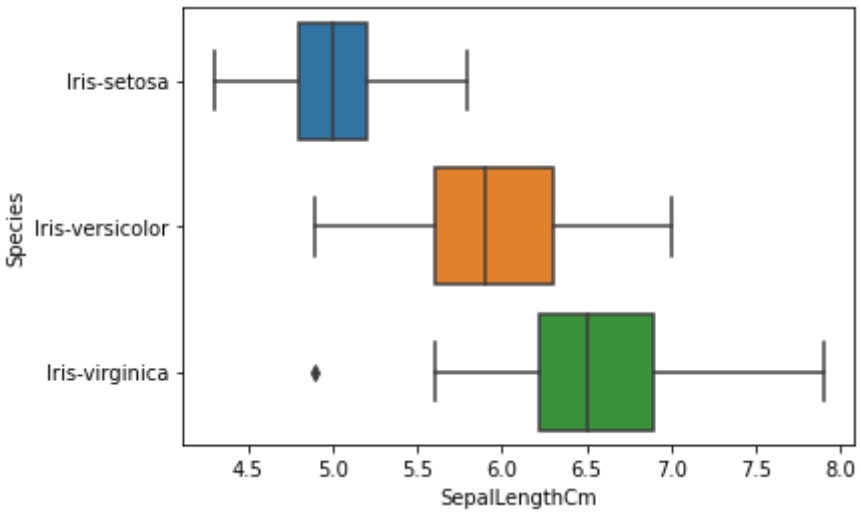


In [18]:

```
sns.boxplot(x='SepalLengthCm',y='Species',data=data)
```

Out[18]:

```
<AxesSubplot:xlabel='SepalLengthCm', ylabel='Species'>
```

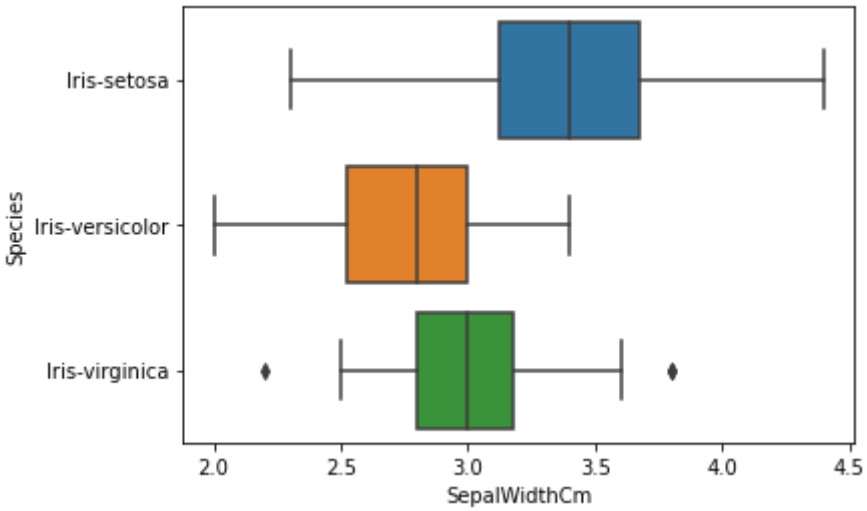


In [19]:

```
sns.boxplot(x='SepalWidthCm',y='Species',data=data)
```

Out[19]:

```
<AxesSubplot:xlabel='SepalWidthCm', ylabel='Species'>
```

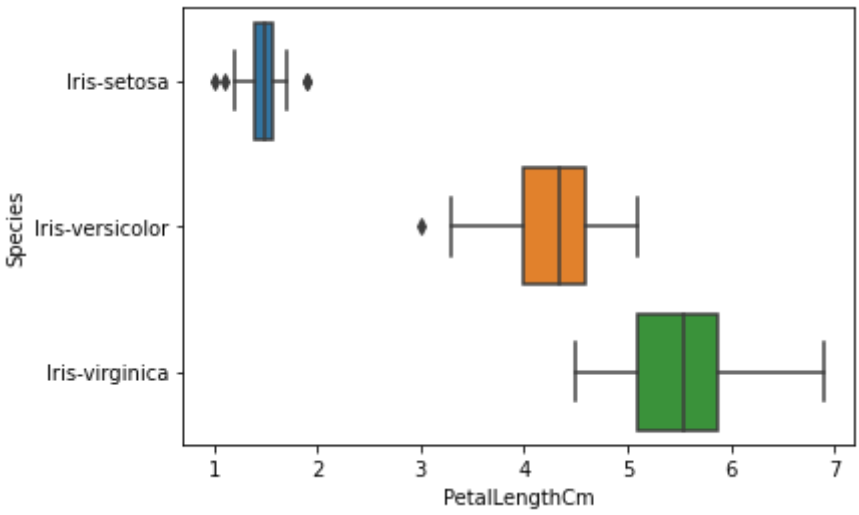


In [20]:

```
sns.boxplot(x='PetalLengthCm',y='Species',data=data)
```

Out[20]:

```
<AxesSubplot:xlabel='PetalLengthCm', ylabel='Species'>
```

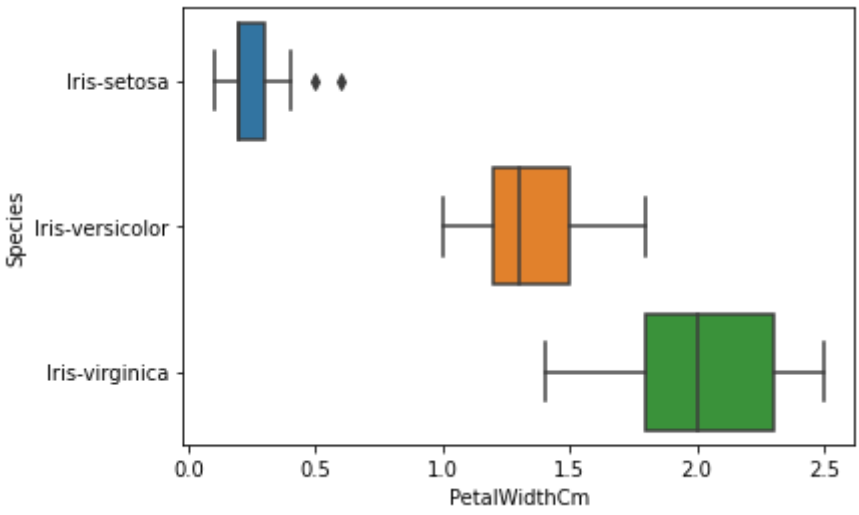


In [21]:

```
sns.boxplot(x='PetalWidthCm',y='Species',data=data)
```

Out[21]:

```
<AxesSubplot:xlabel='PetalWidthCm', ylabel='Species'>
```



In [ ]: