import pandas as pd
import seaborn as sns
import numpy as np

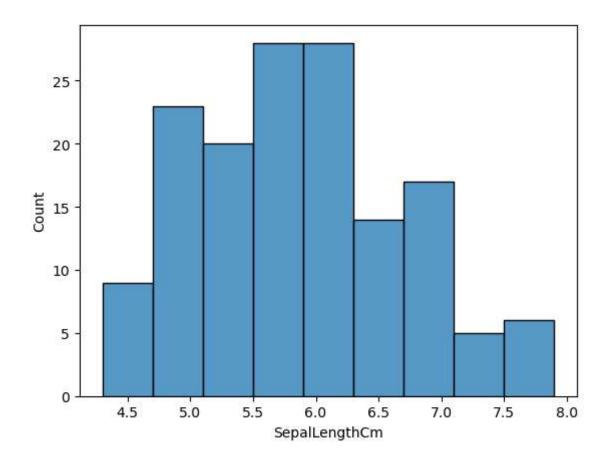
In [15]: df1=pd.read_csv("Iris.csv")

In [16]: df1.head()

Out[16]: Id SepalLengthCm SepalWidthCm PetalLengthCm PetalWidthCm Species **0** 1 5.1 3.5 1.4 0.2 Iris-setosa **1** 2 0.2 Iris-setosa 3.0 1.4 4.9 **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

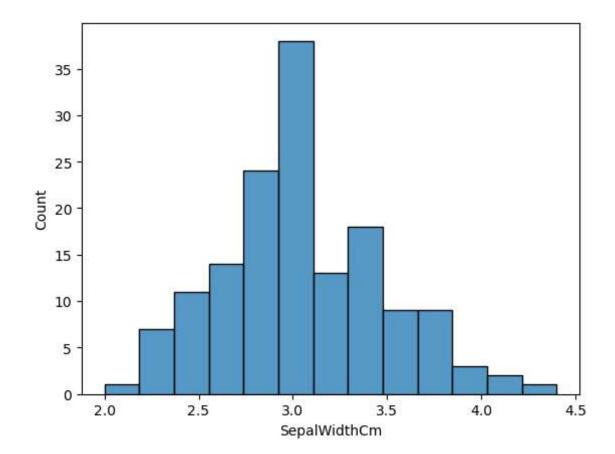
In [17]: sns.histplot(df1.SepalLengthCm)

Out[17]: <Axes: xlabel='SepalLengthCm', ylabel='Count'>



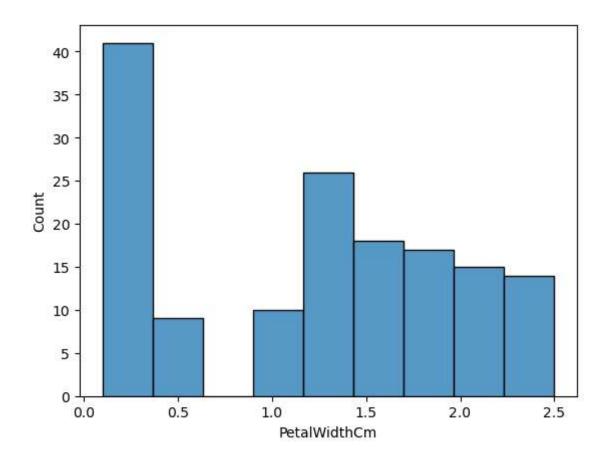
In [18]: sns.histplot(df1.SepalWidthCm)

Out[18]: <Axes: xlabel='SepalWidthCm', ylabel='Count'>



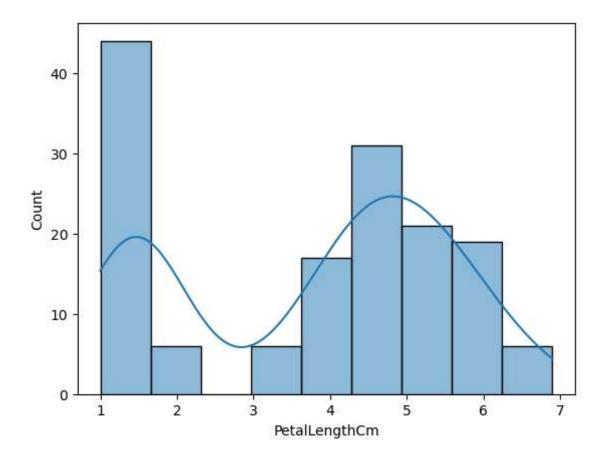
In [19]: sns.histplot(df1.PetalWidthCm)

 ${\tt Out[19]:} \quad {\tt <Axes: xlabel='PetalWidthCm', ylabel='Count'>}$



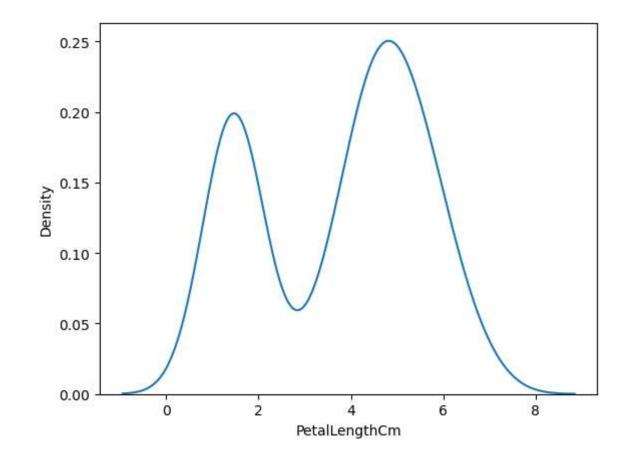
In [53]: sns.histplot(df1.PetalLengthCm,kde=True)

Out[53]: <Axes: xlabel='PetalLengthCm', ylabel='Count'>



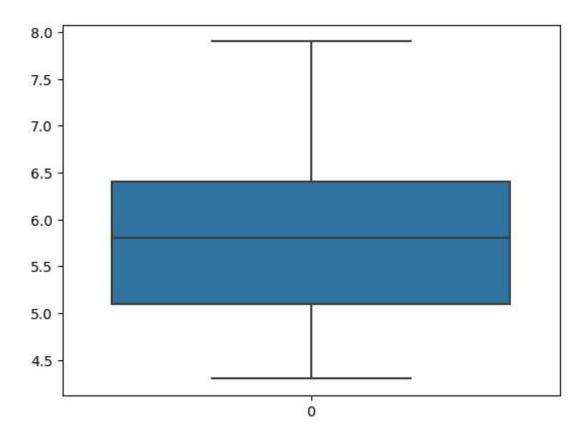
In [54]: sns.kdeplot(df1['PetalLengthCm'])

 $\mathsf{Out}[54]$: <Axes: xlabel='PetalLengthCm', ylabel='Density'>



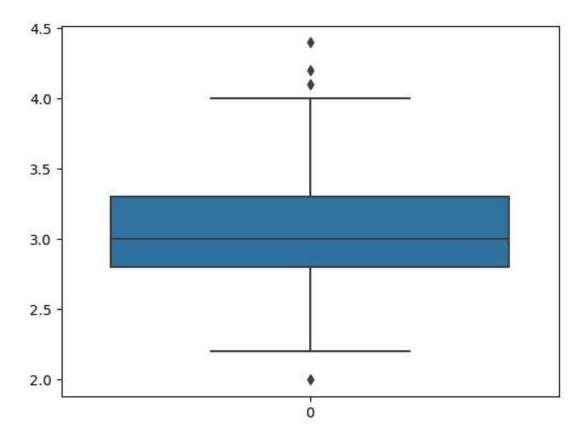
```
In [21]: sns.boxplot(df1['SepalLengthCm'])
```

Out[21]: <Axes: >



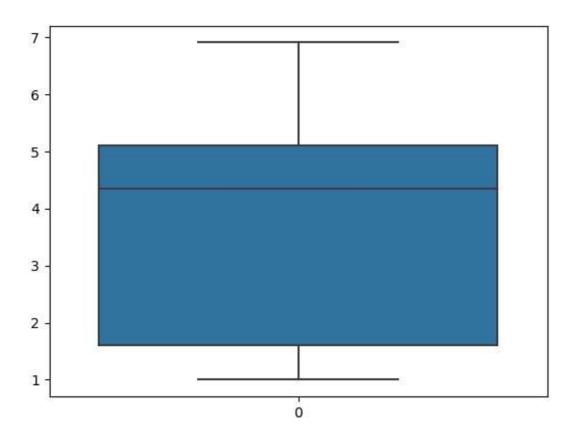
```
In [22]: sns.boxplot(df1['SepalWidthCm'])
```

Out[22]: <Axes: >



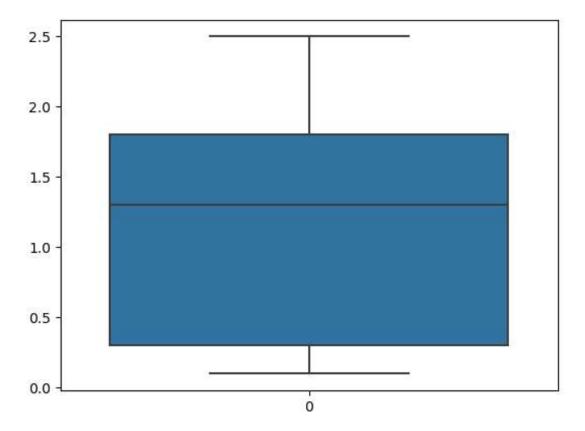
```
In [23]: sns.boxplot(df1['PetalLengthCm'])
```

Out[23]: <Axes: >



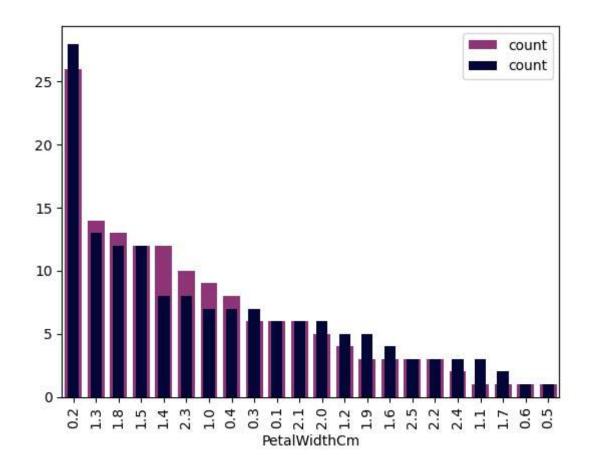
```
In [24]: sns.boxplot(df1['PetalWidthCm'])
```

Out[24]: <Axes: >



```
In [43]: ax = df1['SepalWidthCm'].value_counts().plot(kind='bar', color='#720455', width=.75, legend=True, alpha=0.8)
    df1['PetalWidthCm'].value_counts().plot(kind='bar', color='#030637', width=.5, alpha=1, legend=True)
```

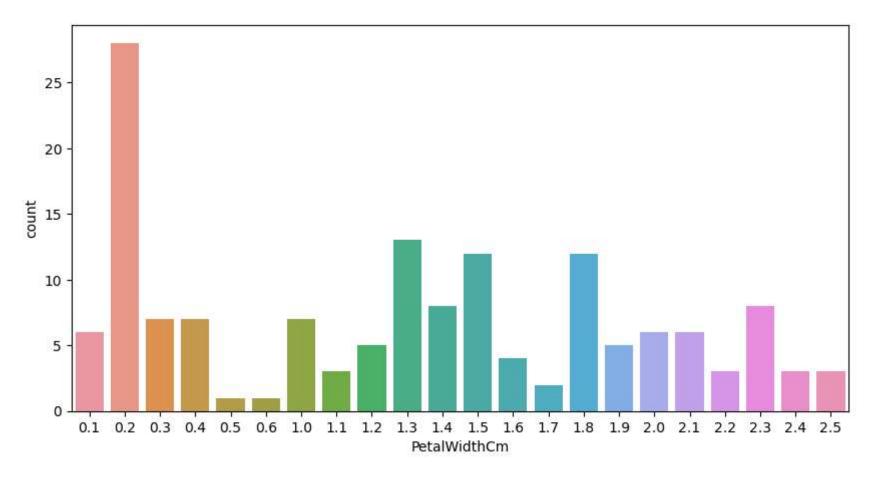
Out[43]: <Axes: xlabel='PetalWidthCm'>



In [62]: df1['PetalWidthCm'].value_counts()

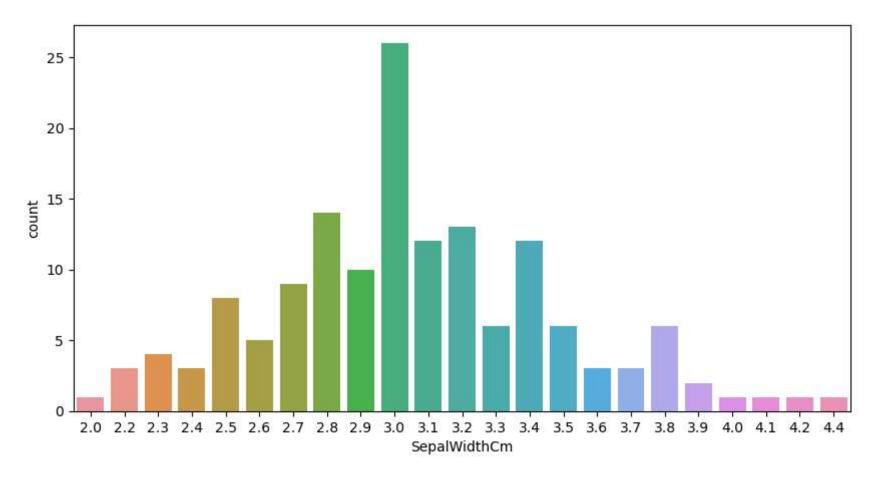
```
PetalWidthCm
Out[62]:
         0.2
               28
         1.3
               13
         1.8
               12
         1.5
               12
         1.4
                8
         2.3
                8
         1.0
                7
         0.4
                7
         0.3
                7
         0.1
         2.1
         2.0
         1.2
         1.9
                 5
         1.6
                4
         2.5
                3
         2.2
                3
         2.4
                 3
         1.1
                3
         1.7
                2
         0.6
                1
         0.5
         Name: count, dtype: int64
In [70]: plt.figure(figsize = (10,5))
         sns.countplot(data = df1,x = 'PetalWidthCm')
         <Axes: xlabel='PetalWidthCm', ylabel='count'>
```

Out[70]:



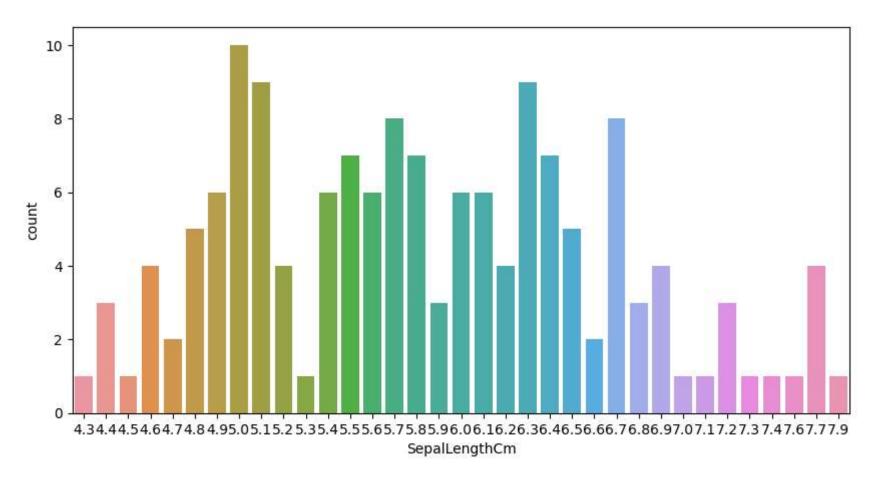
```
In [72]: plt.figure(figsize = (10,5))
sns.countplot(data = df1,x = 'SepalWidthCm')
```

Out[72]: <Axes: xlabel='SepalWidthCm', ylabel='count'>



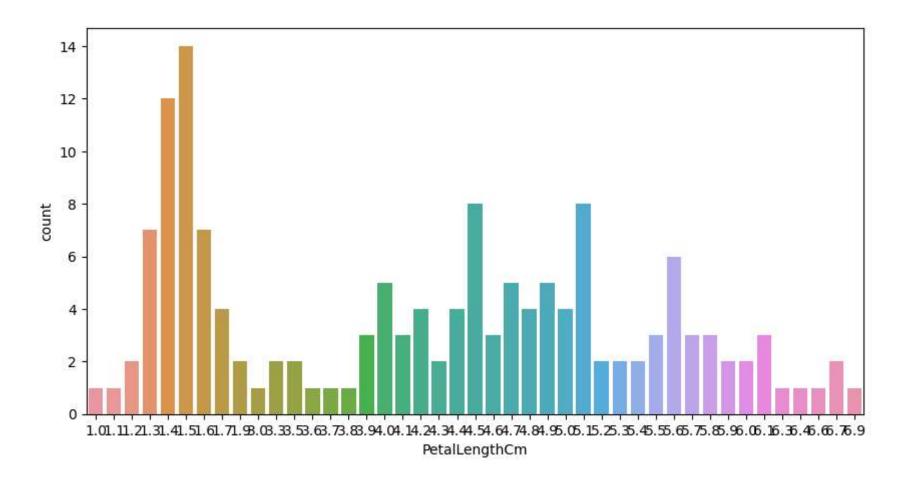
```
In [73]: plt.figure(figsize = (10,5))
sns.countplot(data = df1,x = 'SepalLengthCm')
```

Out[73]: <Axes: xlabel='SepalLengthCm', ylabel='count'>



```
In [74]: plt.figure(figsize = (10,5))
sns.countplot(data = df1,x = 'PetalLengthCm')
```

Out[74]: <Axes: xlabel='PetalLengthCm', ylabel='count'>



In []: