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

In [2]:
```
df = pd.read_csv('iris.csv')
```

In [3]:
```
df.columns = ('SL', 'SW', 'PL', 'PW', 'Species')
```

In [4]:
```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 150 entries, 0 to 149
Data columns (total 5 columns):
 #   Column   Non-Null Count  Dtype  
---  ------   --------------  -----  
 0   SL       150 non-null    float64
 1   SW       150 non-null    float64
 2   PL       150 non-null    float64
 3   PW       150 non-null    float64
 4   Species  150 non-null    object 
dtypes: float64(4), object(1)
memory usage: 6.0+ KB
```

In [5]:
```
print('Statistical information of Numerical Columns:')
df.describe()
```

```
Statistical information of Numerical Columns:
```

Out[5]:

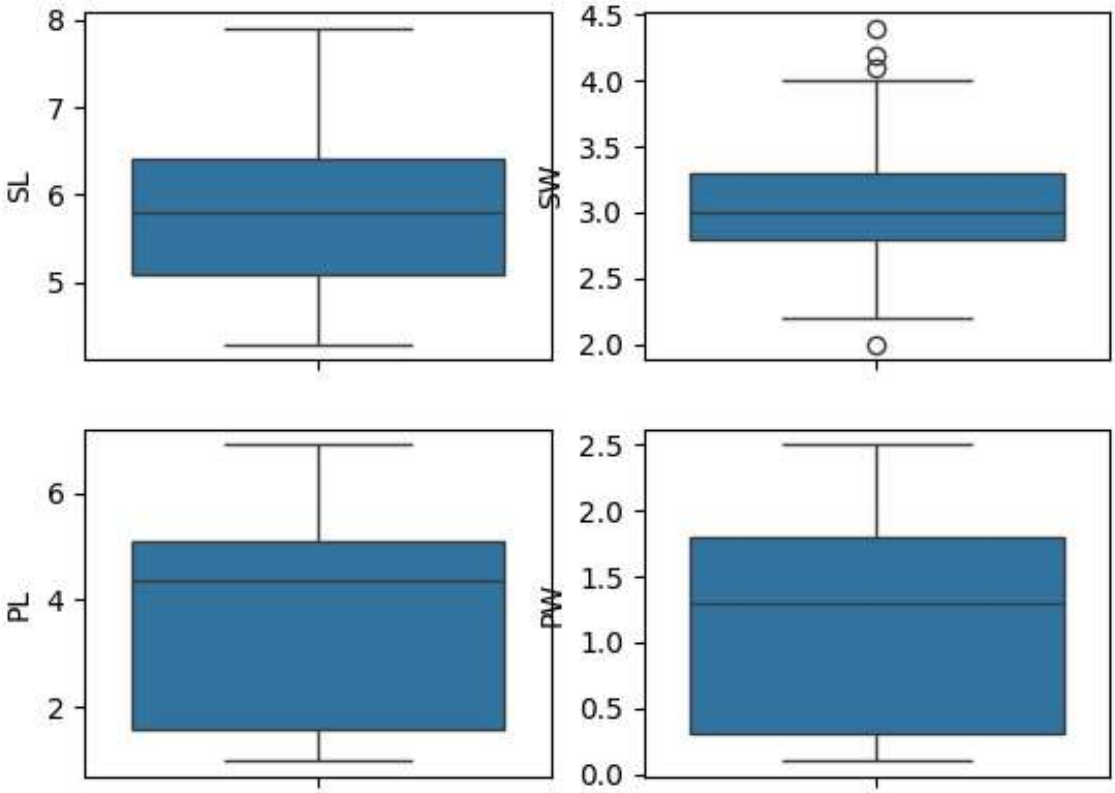
	SL	SW	PL	PW
count	150.000000	150.000000	150.000000	150.000000
mean	5.843333	3.054000	3.758667	1.198667
std	0.828066	0.433594	1.764420	0.763161
min	4.300000	2.000000	1.000000	0.100000
25%	5.100000	2.800000	1.600000	0.300000
50%	5.800000	3.000000	4.350000	1.300000
75%	6.400000	3.300000	5.100000	1.800000
max	7.900000	4.400000	6.900000	2.500000

In [6]:
```
print('Total Number of Null Values in Dataset:')
df.isnull().sum()
```

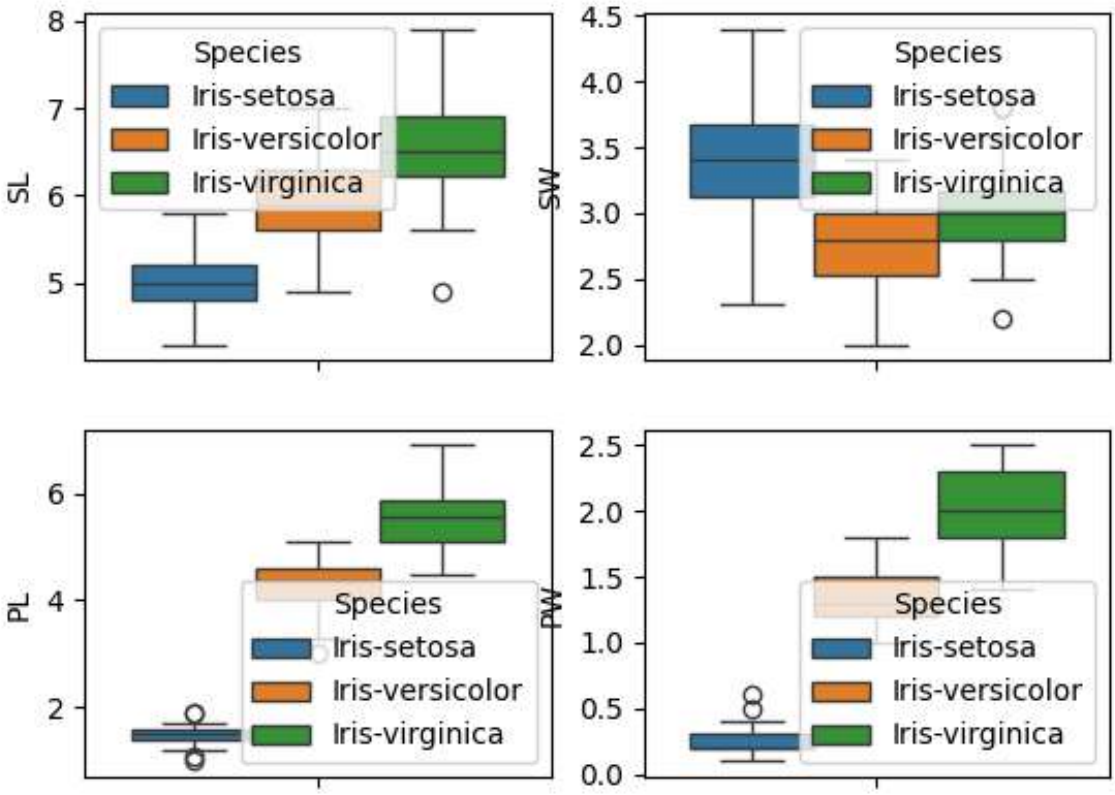
```
Total Number of Null Values in Dataset:
```

Out[6]:
```
SL         0
SW         0
PL         0
PW         0
Species    0
dtype: int64
```

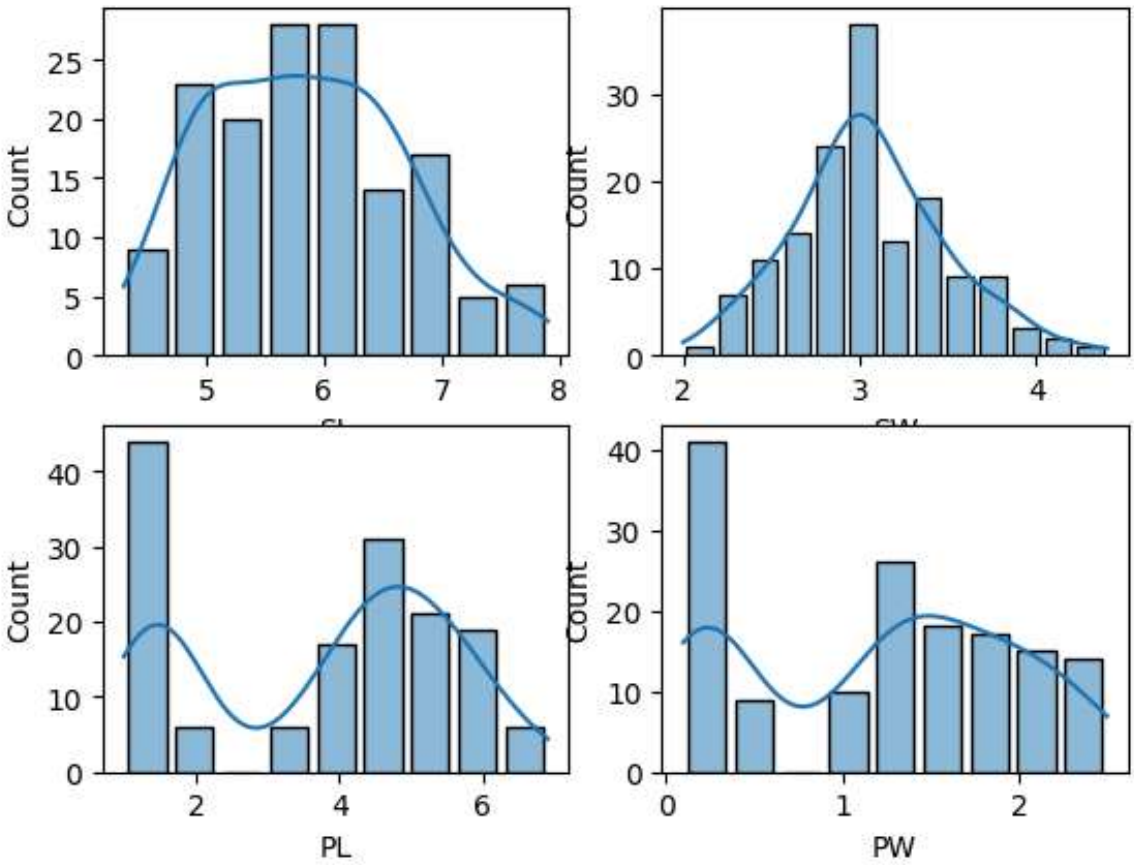
In [7]:
```
fig, axis = plt.subplots(2,2)
sns.boxplot(ax = axis[0,0], data = df, y='SL')
sns.boxplot(ax = axis[0,1], data = df, y='SW')
sns.boxplot(ax = axis[1,0], data = df, y='PL')
sns.boxplot(ax = axis[1,1], data = df, y='PW')
plt.show()
```



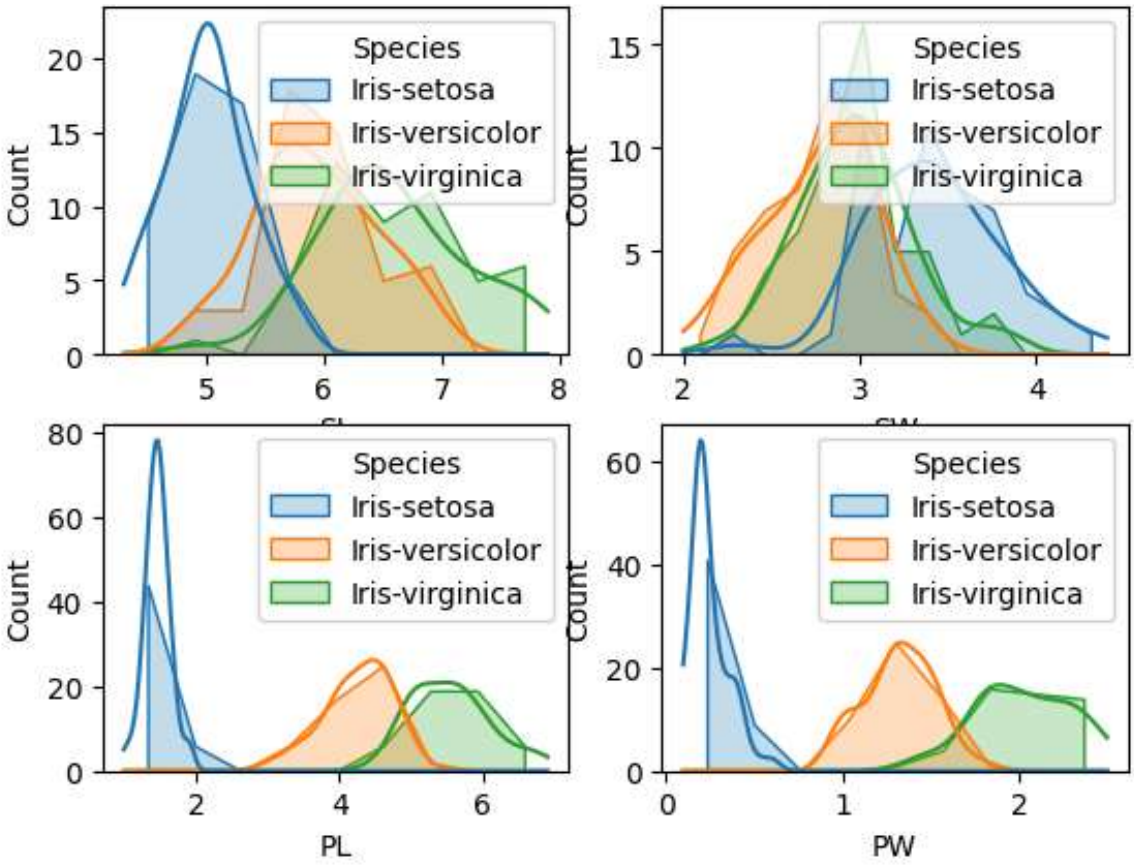
In [8]:
```
fig, axis = plt.subplots(2,2)
sns.boxplot(ax = axis[0,0], data = df, y='SL', hue='Species')
sns.boxplot(ax = axis[0,1], data = df, y='SW', hue='Species')
sns.boxplot(ax = axis[1,0], data = df, y='PL', hue='Species')
sns.boxplot(ax = axis[1,1], data = df, y='PW', hue='Species')
plt.show()
```



In [9]:
```
fig, axis = plt.subplots(2,2)
sns.histplot(ax = axis[0,0], data = df, x='SL', multiple = 'dodge', shrink =
sns.histplot(ax = axis[0,1], data = df, x='SW', multiple = 'dodge', shrink =
sns.histplot(ax = axis[1,0], data = df, x='PL', multiple = 'dodge', shrink =
sns.histplot(ax = axis[1,1], data = df, x='PW', multiple = 'dodge', shrink =
plt.show()
```



In [10]:
```
fig, axis = plt.subplots(2,2)
sns.histplot(ax=axis[0,0], data=df, x='SL', hue='Species', element='poly', sh
sns.histplot(ax=axis[0,1], data = df, x='SW', hue = 'Species', element = 'pol
sns.histplot(ax=axis[1,0], data = df, x='PL', hue = 'Species', element = 'pol
sns.histplot(ax=axis[1,1], data = df, x='PW', hue = 'Species', element = 'pol
plt.show()
```



In [ ]: