Lab-4

Seaborn Exercises

- Name:
- Student ID:

Import Numpy, Panda and Matplotlib library

In [6]:
```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
```

In [7]:
```
import seaborn as sns
%matplotlib inline
```

Import Dataset

In [3]:
```
data = pd.read_csv('iris.csv')
```

In [ ]:
```
# print top 5 row of the dataset
```

In [4]:
```
data.head()
```

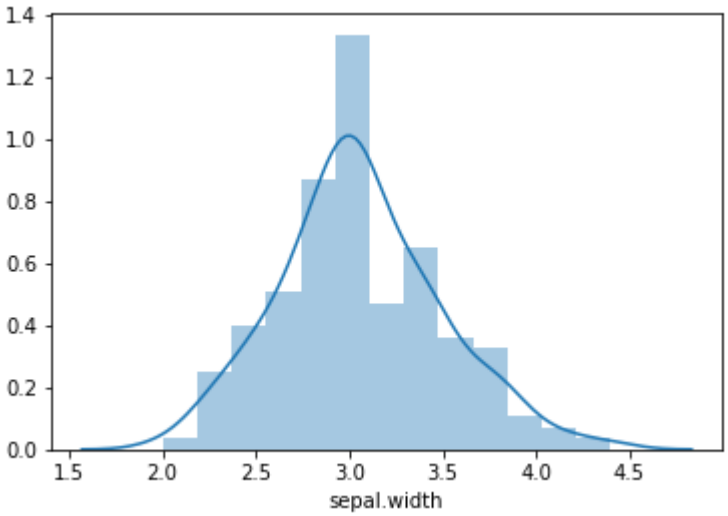
Out[4]:

	sepal.length	sepal.width	petal.length	petal.width	variety
0	5.1	3.5	1.4	0.2	Setosa
1	4.9	3.0	1.4	0.2	Setosa
2	4.7	3.2	1.3	0.2	Setosa
3	4.6	3.1	1.5	0.2	Setosa
4	5.0	3.6	1.4	0.2	Setosa

Exercises 1

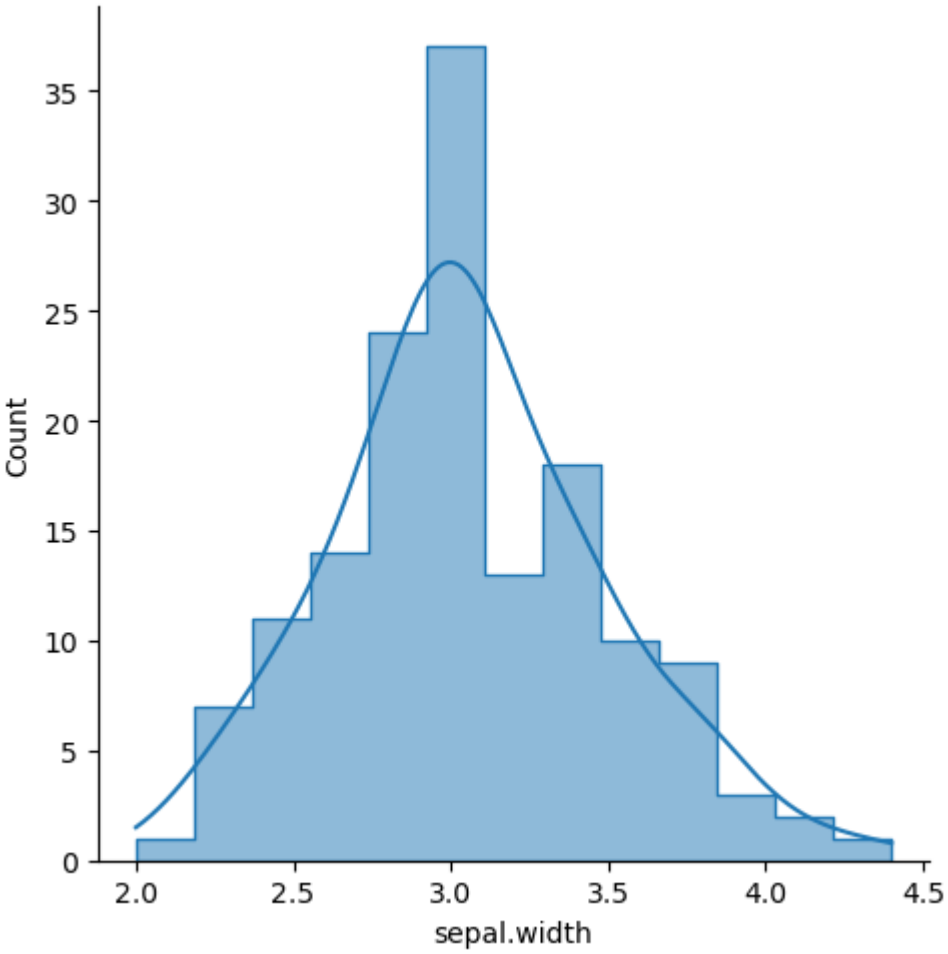
In [20]:
```
# Write the code to show the graph below.
```

Out[20]: <matplotlib.axes._subplots.AxesSubplot at 0x1d8e4adb608>



In [54]:
```
# Creating histogram

sns.displot(data['sepal.width'],kde=True, element="step")
```

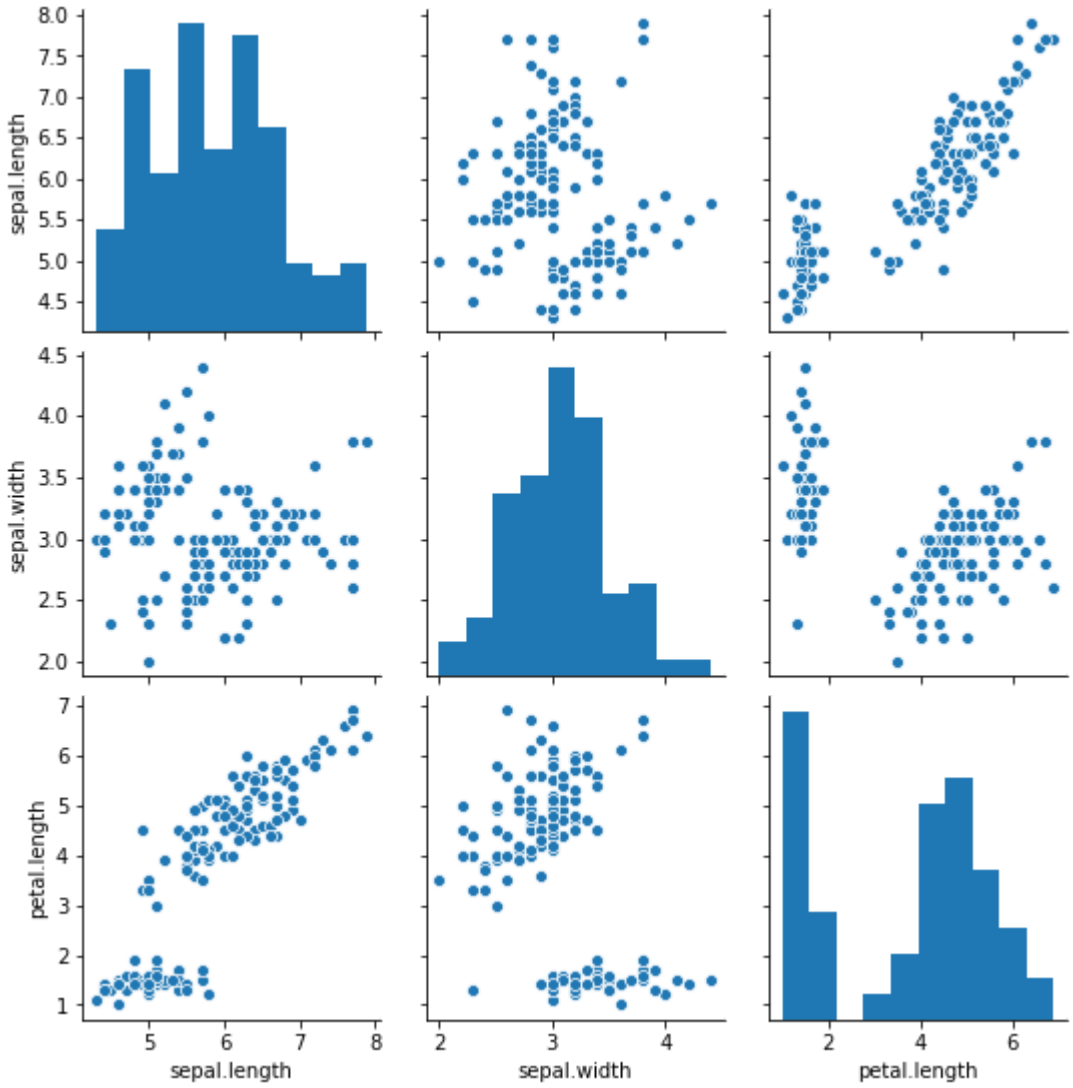
Out[54]: <seaborn.axisgrid.FacetGrid at 0x1c49a63c6d0>



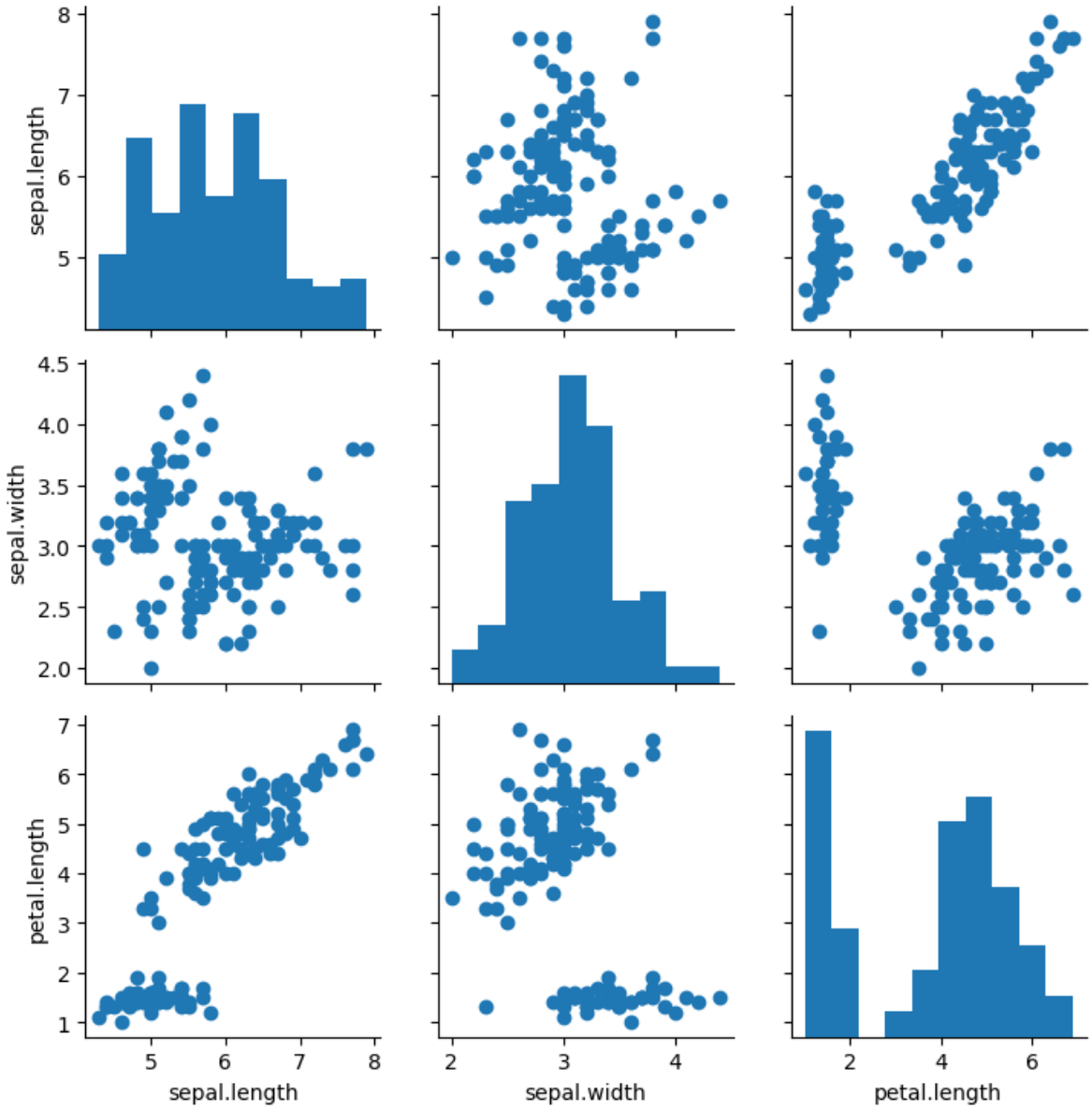
Exercises 2

In [22]:
```
# Write the code to show the graph below.
```

Out[22]: <seaborn.axisgrid.PairGrid at 0x1d8e4b12208>



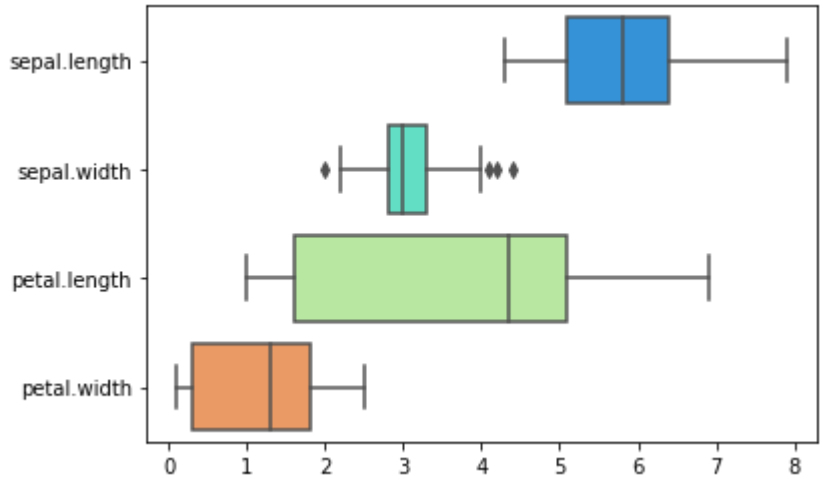
In [67]:
```
data_subset = data[['sepal.length', 'sepal.width', 'petal.length']]
g = sns.PairGrid(data_subset)
g.map_diag(plt.hist)
g.map_upper(plt.scatter)
g.map_lower(plt.scatter)
plt.show()
```



Exercises 3

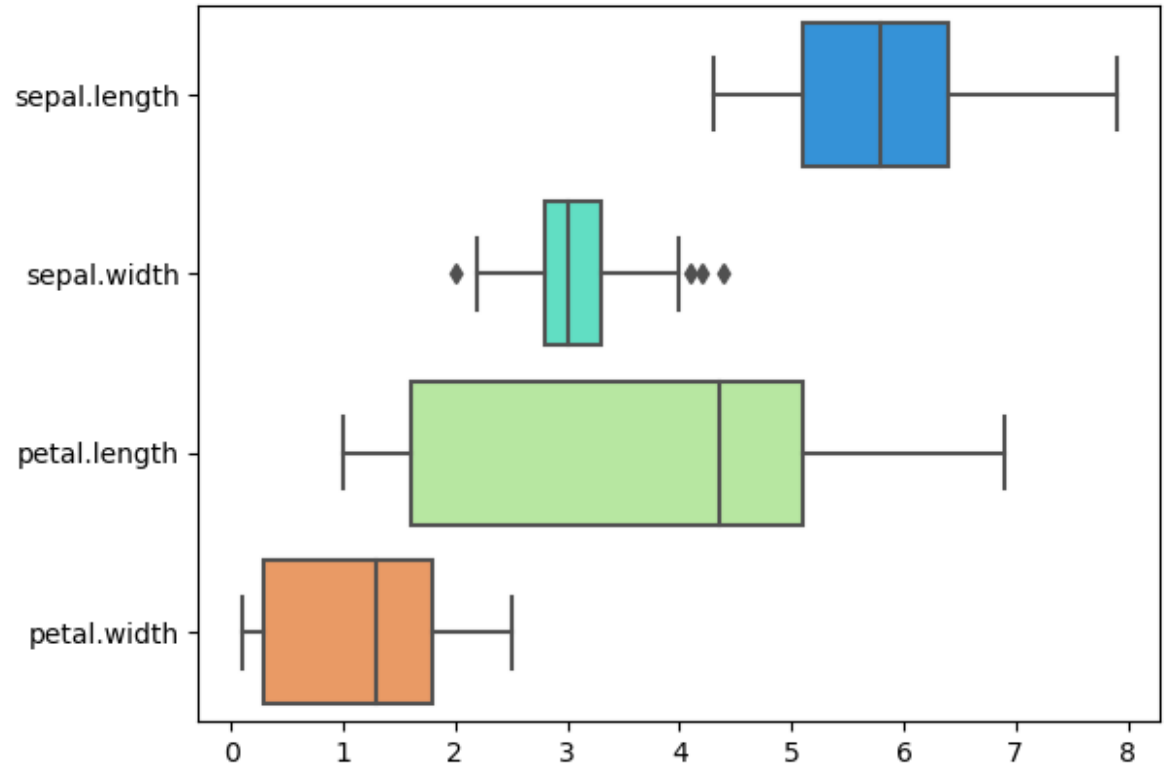
In [23]:
```
# Write the code to show the graph below.
```

Out[23]: <matplotlib.axes._subplots.AxesSubplot at 0x1d8e4fd9108>



In [77]:
```
sns.boxplot(data=data,palette='rainbow',orient='h')
```

Out[77]: <AxesSubplot:>

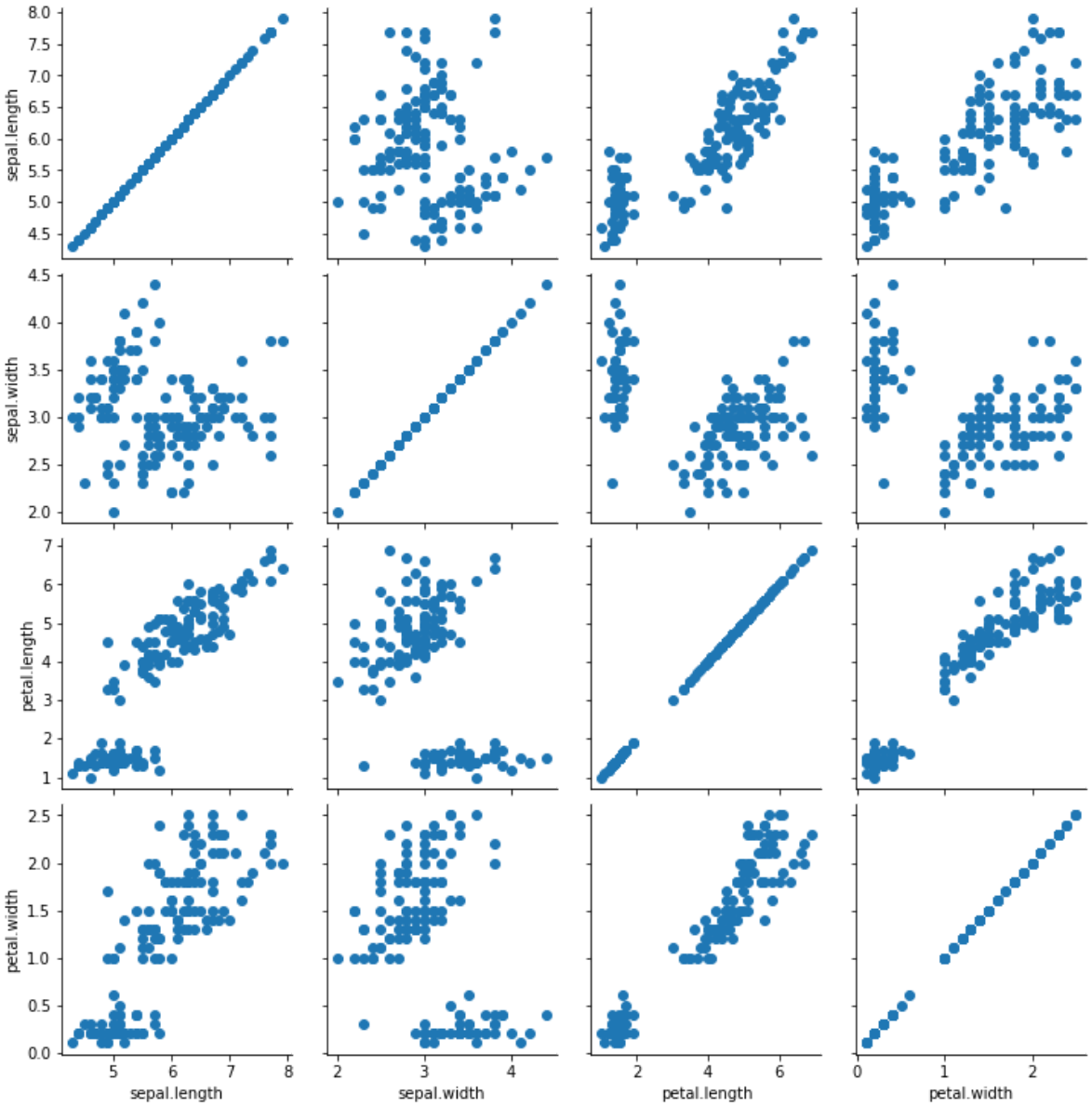


Exercises 4

In [ ]:
```
# Write the code to show the graph below.
```

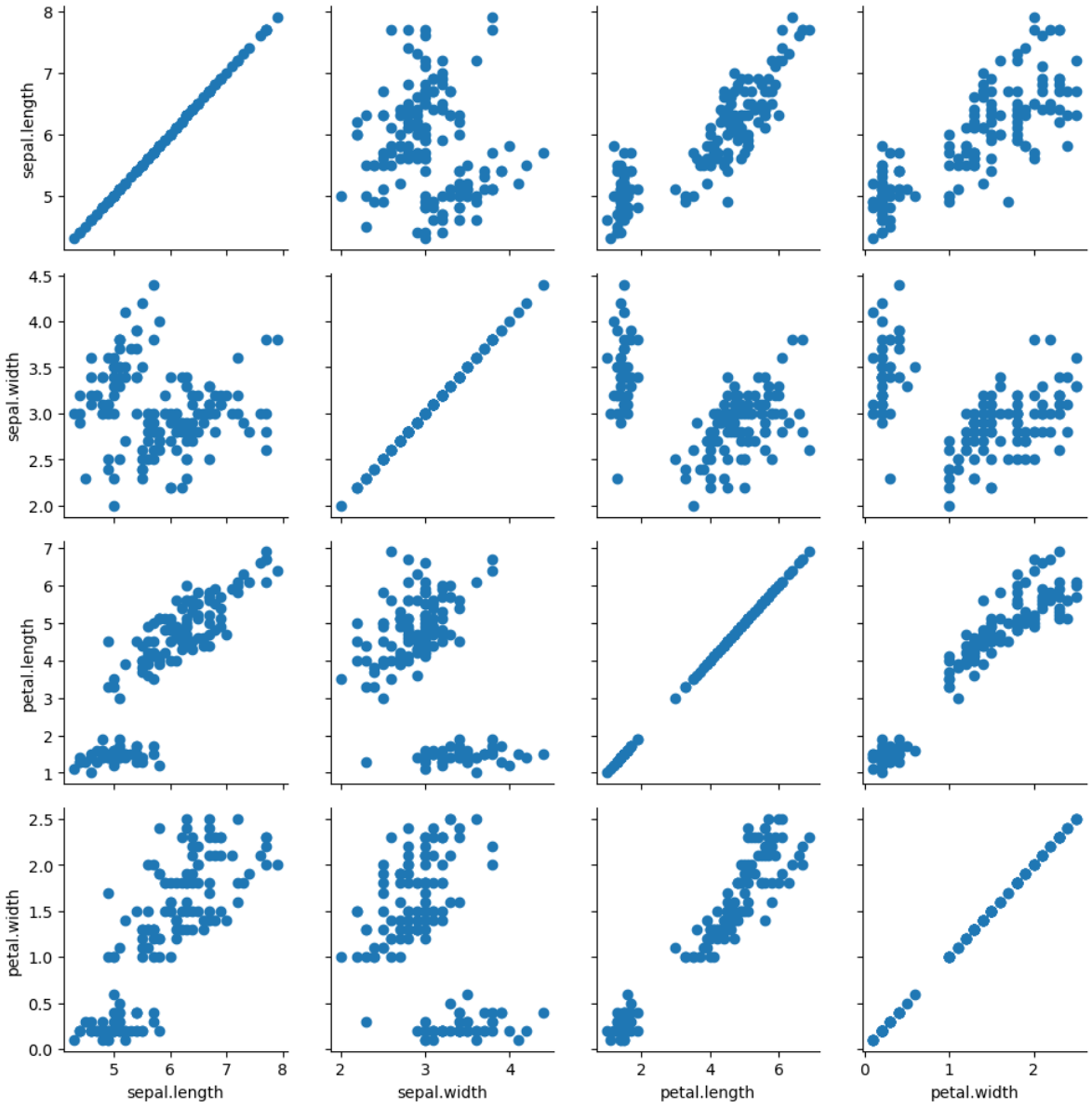
In [24]:
```

```

Out[24]: <seaborn.axisgrid.PairGrid at 0x1d8e51e5908>



In [72]:
```
#data_subset = data[['sepal.length', 'sepal.width', 'petal.length']]
g = sns.PairGrid(data)
g.map(plt.scatter)
```

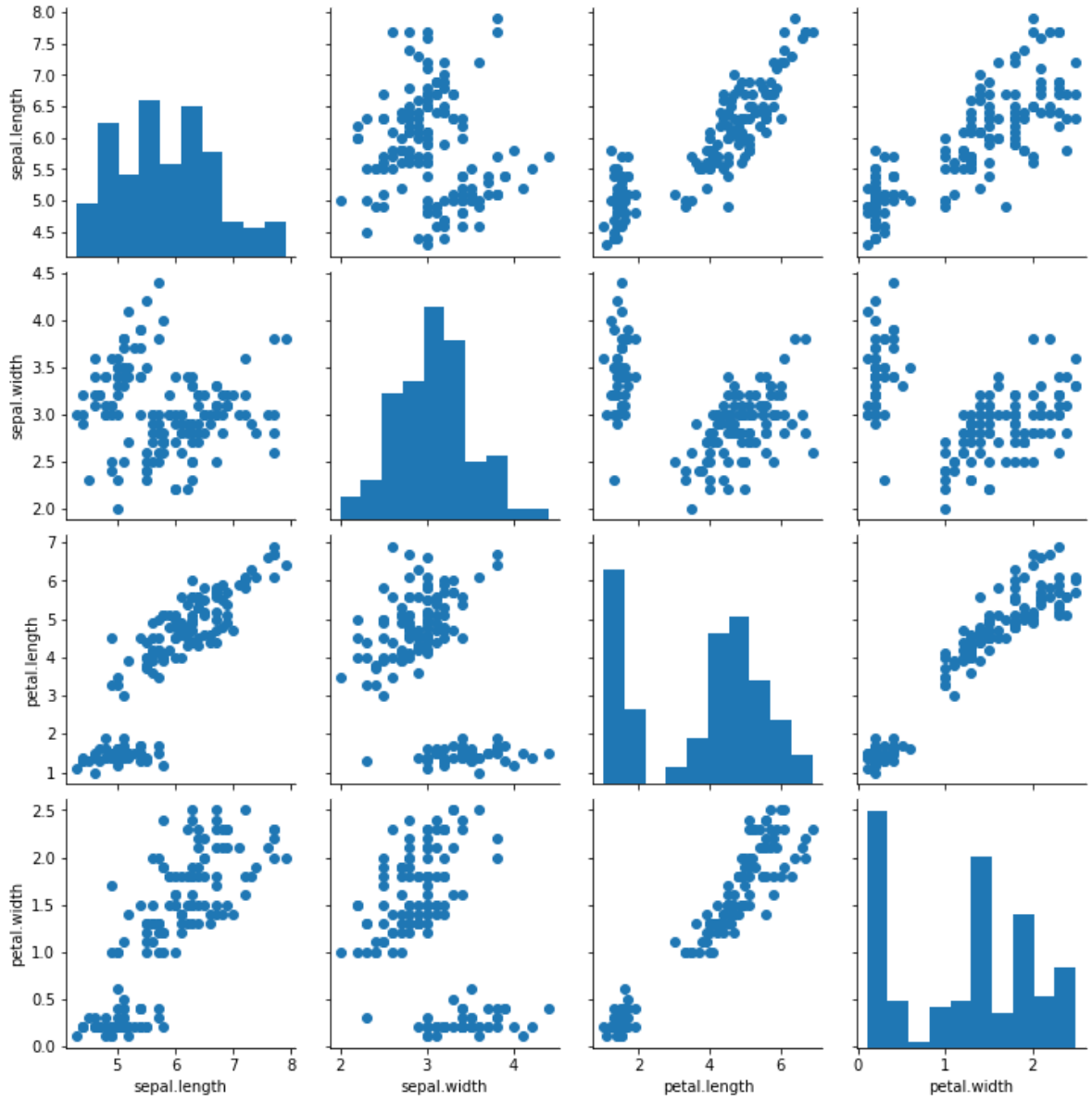
Out[72]: <seaborn.axisgrid.PairGrid at 0x1c49cffe730>



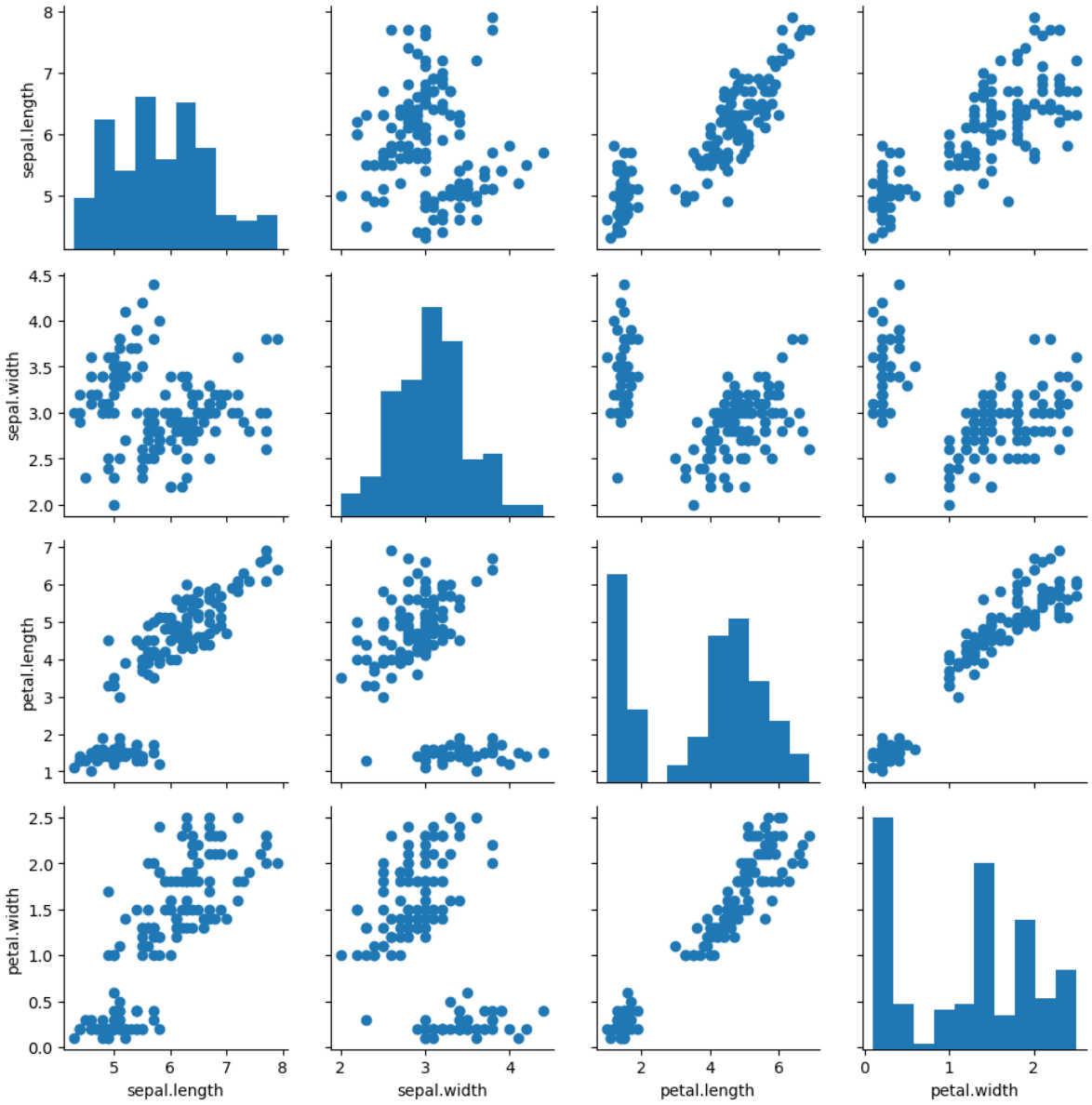
Exercises 5

In [25]:
```
# Write the code to show the graph below.
```

Out[25]: <seaborn.axisgrid.PairGrid at 0x1d8e5930408>



In [73]:
```
g = sns.PairGrid(data)
g.map_diag(plt.hist)
g.map_upper(plt.scatter)
g.map_lower(plt.scatter)
plt.show()
```

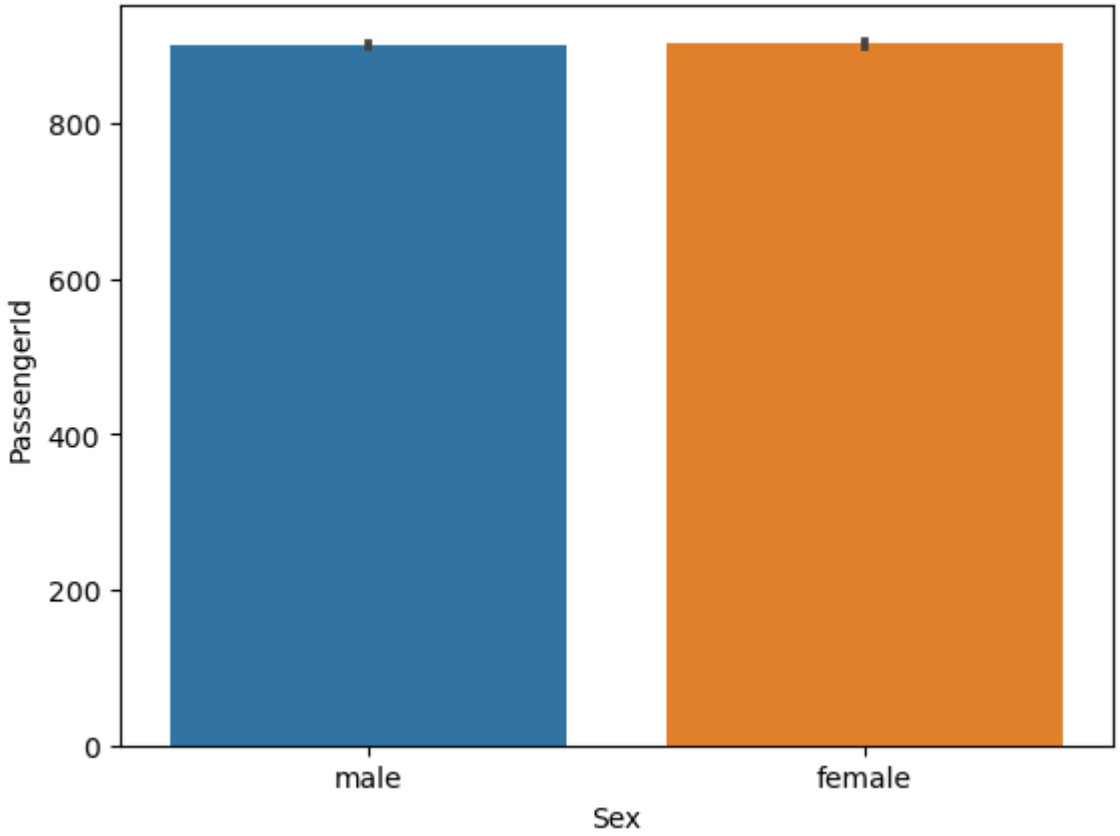


Exercises 6

Create a Categorical Plot for the column Sex of the Titanic dataset.

In [79]:
```
df_titanic = pd.read_csv('Titanic_1.csv')
sns.barplot(x='Sex',y='PassengerId',data=df_titanic)
```

Out[79]: <AxesSubplot:xlabel='Sex', ylabel='PassengerId'>



Please save as Pdf and submit in Blackboard Lab4.

In [ ]: