

# Lab-4

## Seaborn Exercises

```
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```

## Import Numpy, Panda and Matplotlib library

In [1]:

```
import numpy as np  
import pandas as pd  
import matplotlib.pyplot as plt  
import seaborn as sns
```

In [2]:

```
%matplotlib inline
```

## Import Dataset

In [3]:

```
iris = pd.read_csv('E:\Programming\Humber college\Humber Sem 2\Data Analytics\Week-5\iris.c
```

In [ ]:

```
# print top 5 row of the dataset
```

In [4]:

```
iris.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 [5]:

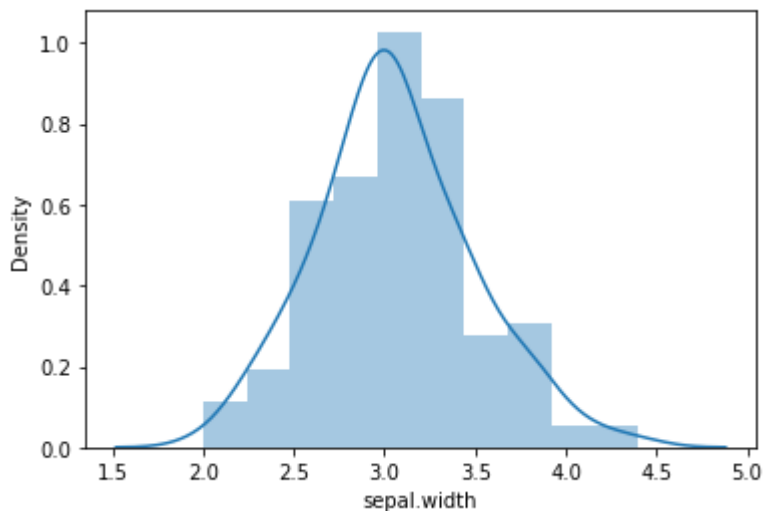
```
# Write the code to show the graph below.  
sns.distplot(iris['sepal.width'],kde=True,bins=10)
```

C:\Users\meet2\anaconda3\lib\site-packages\seaborn\distributions.py:2557: FutureWarning: `distplot` is a deprecated function and will be removed in a future version. Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).

```
warnings.warn(msg, FutureWarning)
```

Out[5]:

<AxesSubplot:xlabel='sepal.width', ylabel='Density'>



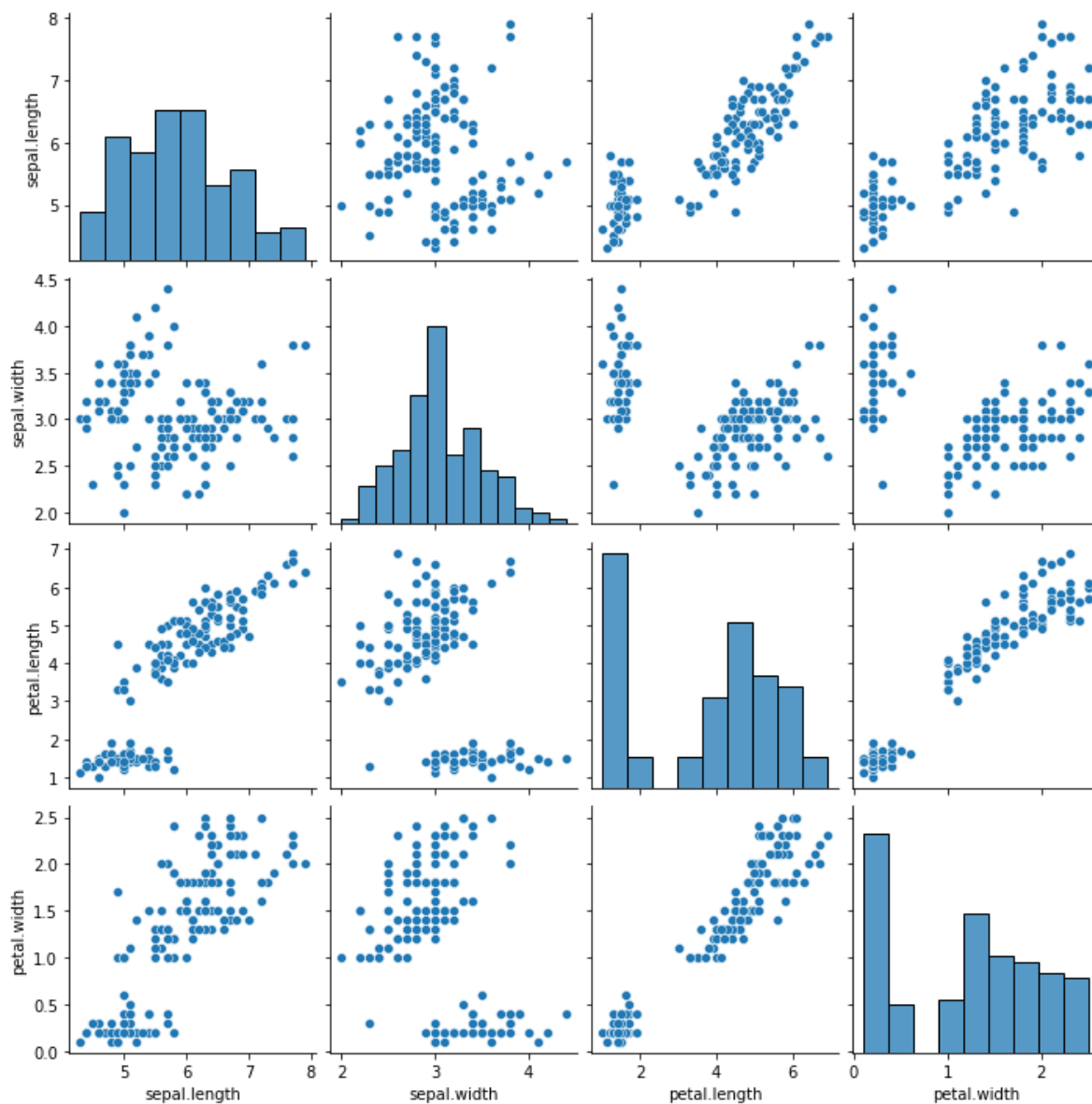
## Exercises 2

In [9]:

```
# Write the code to show the graph below.  
sns.pairplot(iris)
```

Out[9]:

<seaborn.axisgrid.PairGrid at 0x27424e4f250>



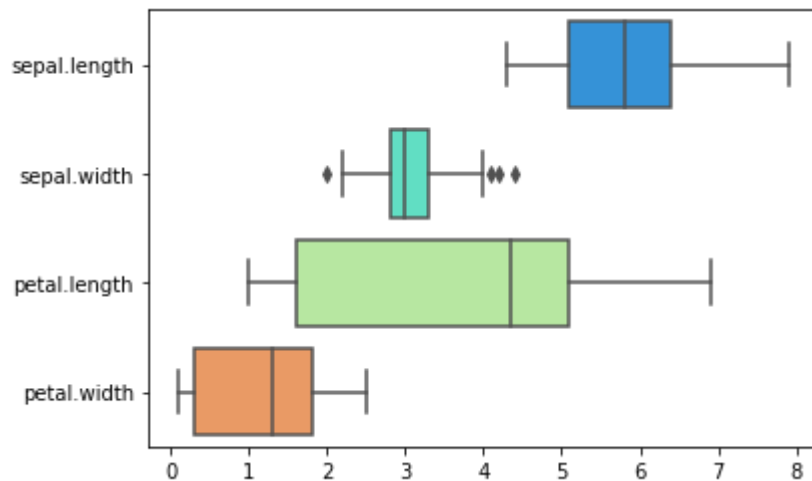
## Exercises 3

In [7]:

```
# Write the code to show the graph below.  
sns.boxplot(data=iris,palette='rainbow',orient='h')
```

Out[7]:

<AxesSubplot:>



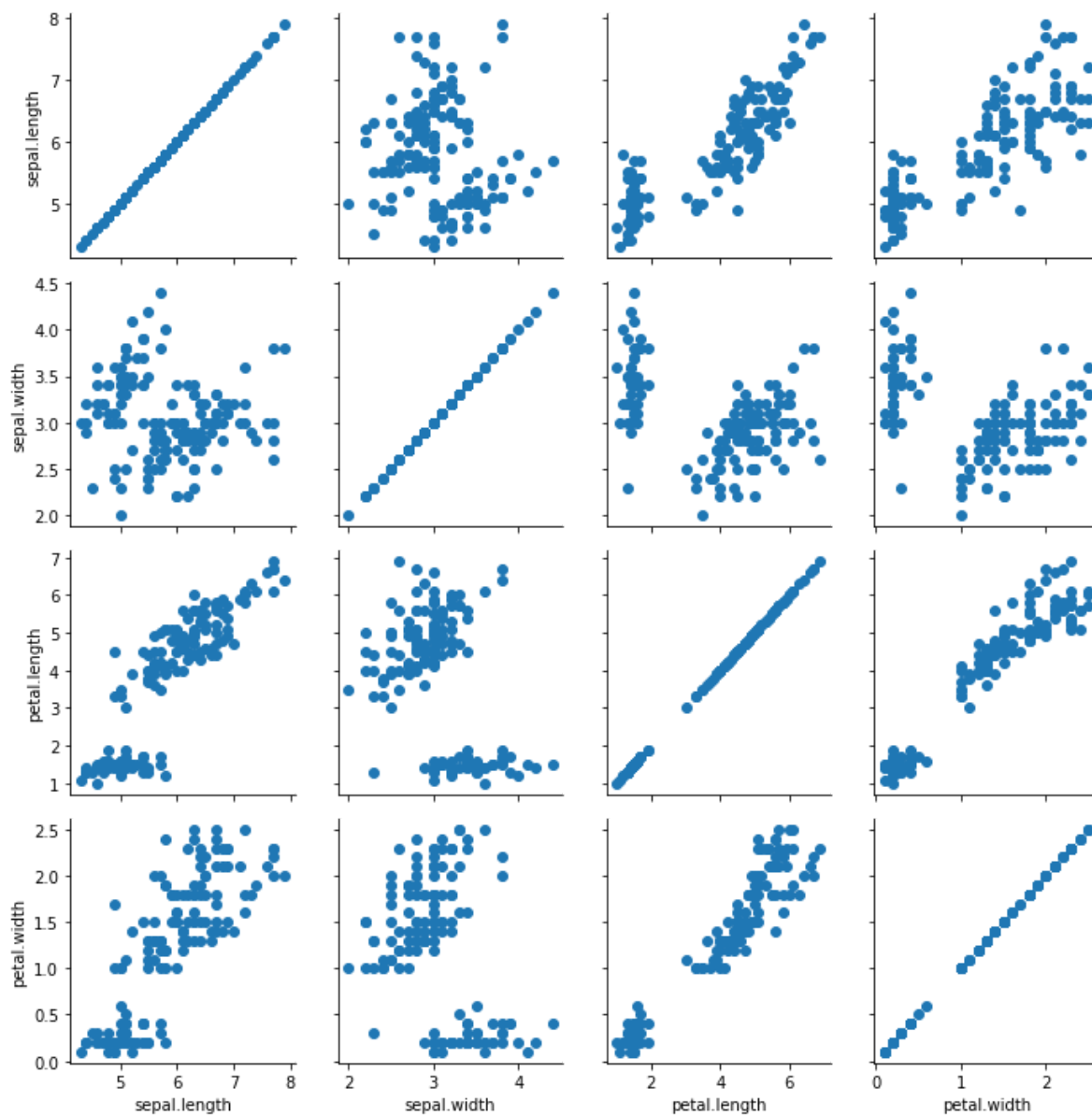
## Exercises 4

In [11]:

```
# Write the code to show the graph below.  
g = sns.PairGrid(iris)  
g.map(plt.scatter)
```

Out[11]:

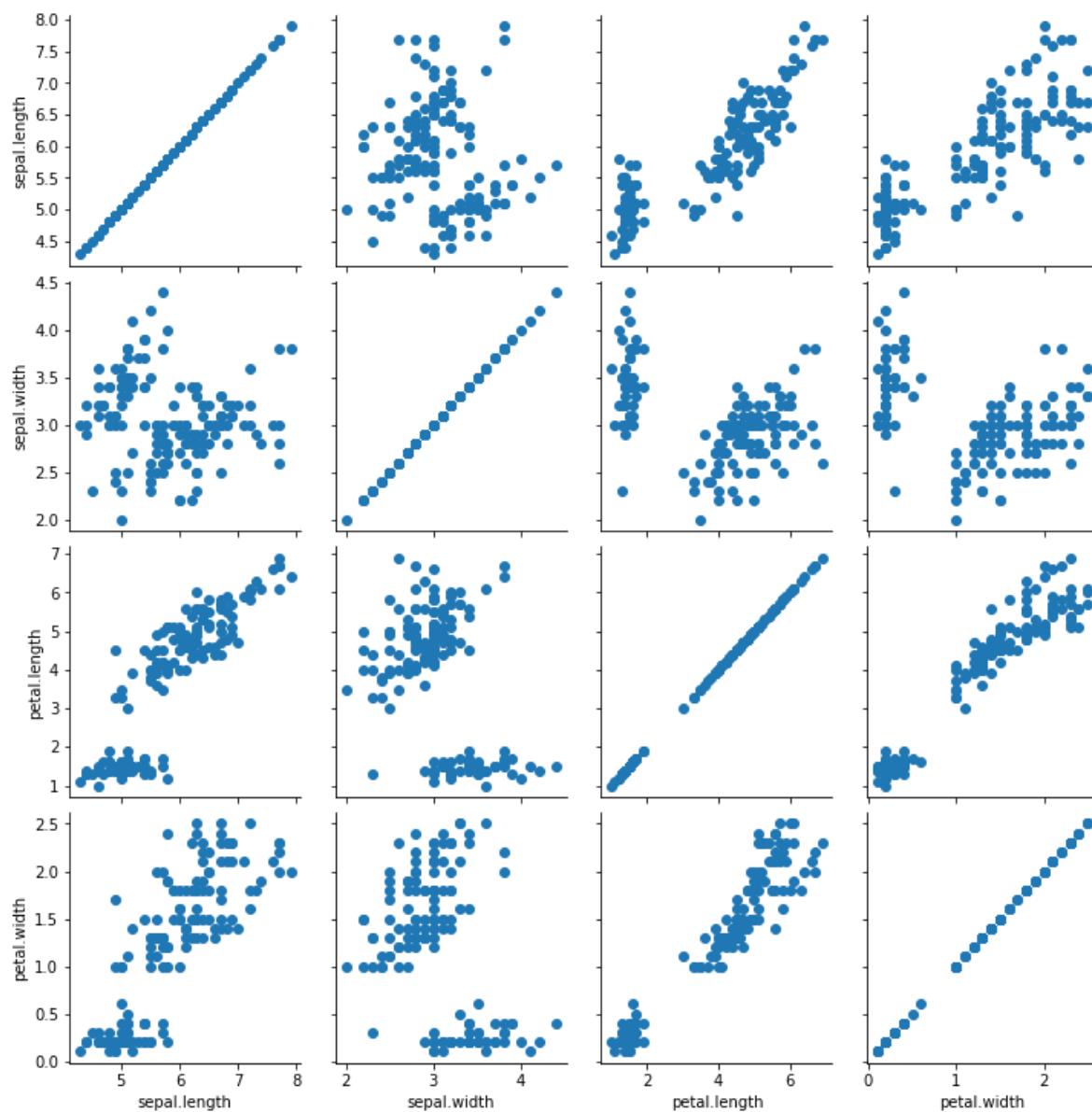
<seaborn.axisgrid.PairGrid at 0x274260fb940>



In [24]:

Out[24]:

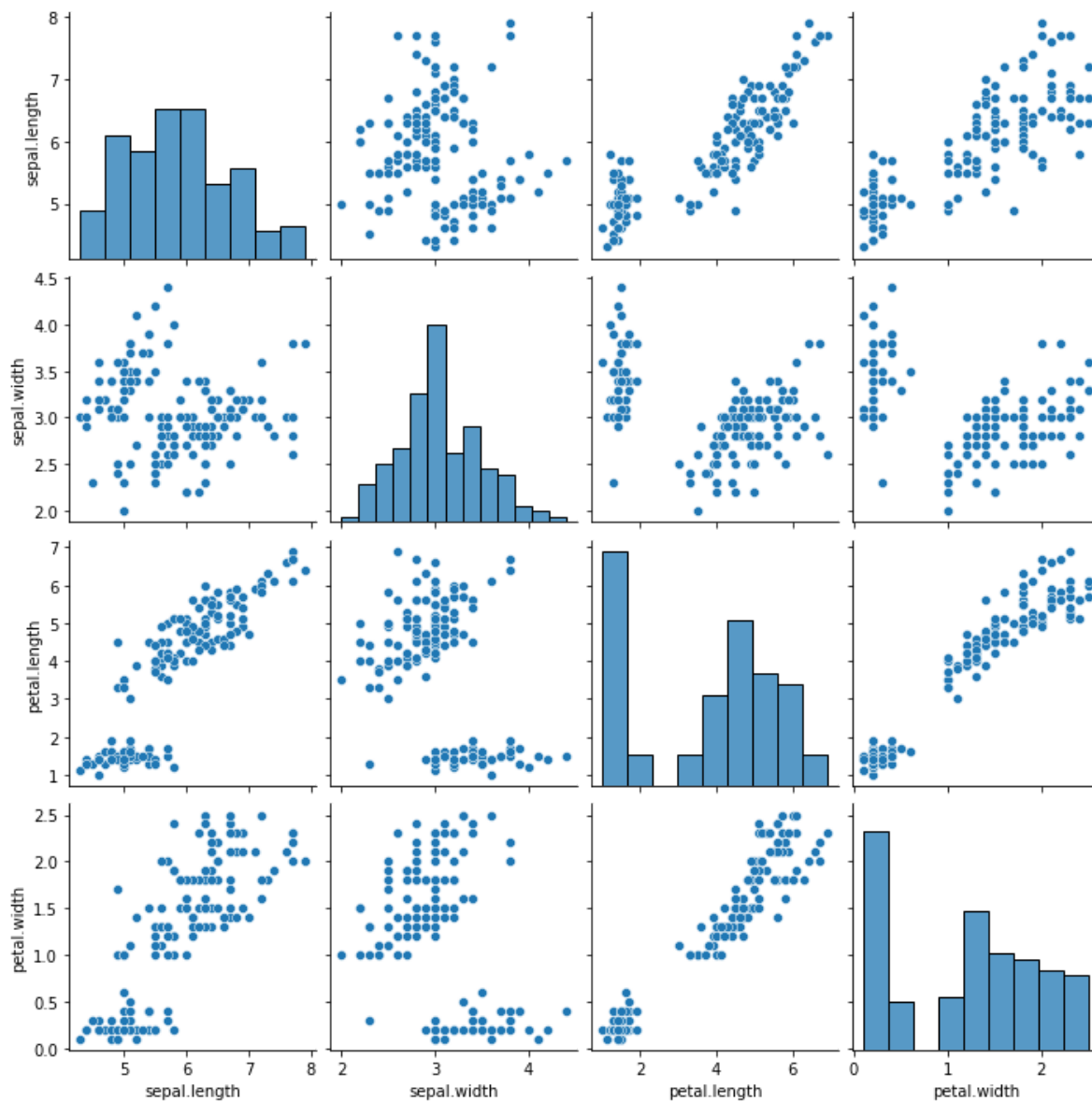
<seaborn.axisgrid.PairGrid at 0x1d8e51e5908>



## Exercises 5

In [14]:

```
# Write the code to show the graph below.
iris_subset = iris[['sepal.length', 'sepal.width', 'petal.length', 'petal.width']]
sns.pairplot(iris_subset)
plt.show()
```



## Exercises 6

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

In [17]:

```
titanic = pd.read_csv('E:\Programming\Humber college\Humber Sem 2\Data Analytics\Week-4/Tit
titanic.head()
```

Out[17]:

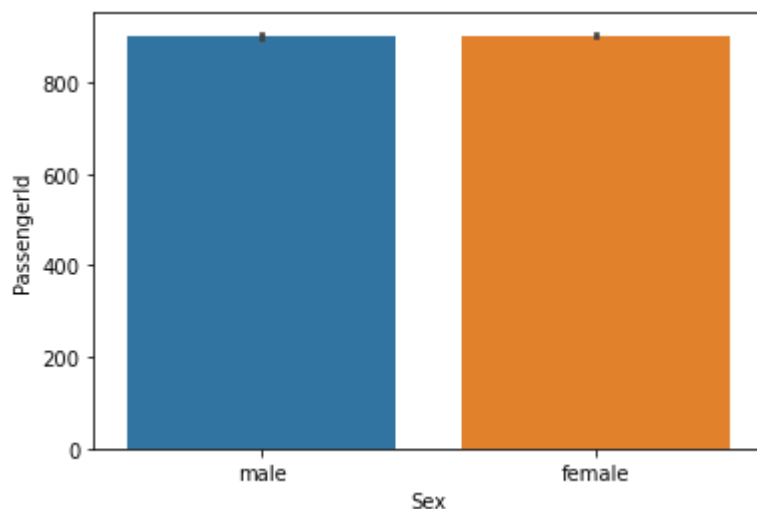
	PassengerId	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin	Embarked
0	892	3	Kelly, Mr. James	male	34.5	0	0	330911	7.8292	NaN	
1	893	3	Wilkes, Mrs. James (Ellen Needs)	female	47.0	1	0	363272	7.0000	NaN	
2	894	2	Myles, Mr. Thomas Francis	male	62.0	0	0	240276	9.6875	NaN	
3	895	3	Wirz, Mr. Albert	male	27.0	0	0	315154	8.6625	NaN	
4	896	3	Hirvonen, Mrs. Alexander (Helga E Lindqvist)	female	22.0	1	1	3101298	12.2875	NaN	

In [18]:

```
sns.barplot(x='Sex',y='PassengerId',data=titanic)
```

Out[18]:

```
<AxesSubplot:xlabel='Sex', ylabel='PassengerId'>
```



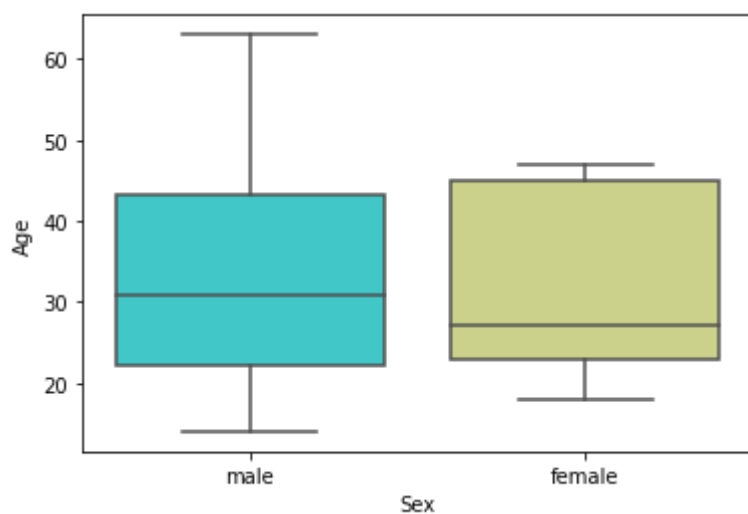


In [19]:

```
sns.boxplot(x="Sex", y="Age", data=titanic,palette='rainbow')
```

Out[19]:

<AxesSubplot:xlabel='Sex', ylabel='Age'>

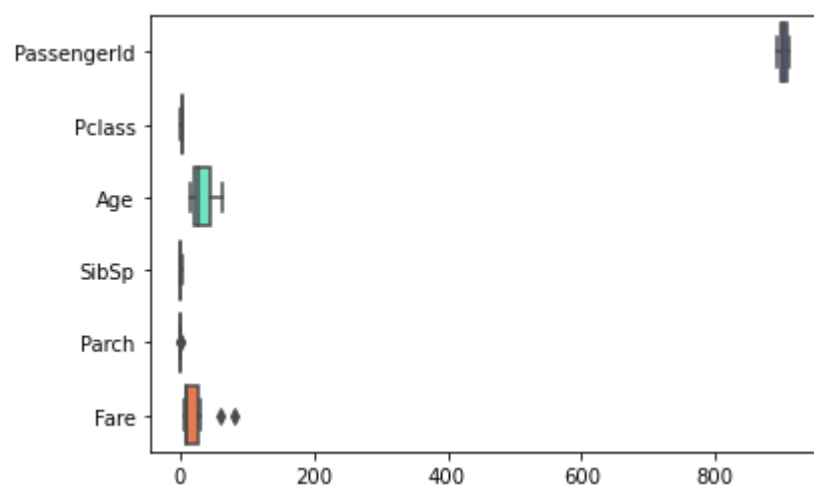


In [20]:

```
sns.boxplot(data=titanic,palette='rainbow',orient='h')
```

Out[20]:

<AxesSubplot:>



Please save as Pdf and submit in Blackboard Lab4.

In [ ]: