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In [1]: #B54 Ajit waman
#practical10

import seaborn as sns
iris = sns.load_dataset("iris")
```

```
In [2]: iris
```

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Out[2]:
```

	sepal_length	sepal_width	petal_length	petal_width	species
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
...
145	6.7	3.0	5.2	2.3	virginica
146	6.3	2.5	5.0	1.9	virginica
147	6.5	3.0	5.2	2.0	virginica
148	6.2	3.4	5.4	2.3	virginica
149	5.9	3.0	5.1	1.8	virginica

150 rows × 5 columns

```
In [3]: iris.info
```

```
Out[3]:
```

	sepal_length	sepal_width	petal_length	petal_w
0	5.1	3.5	1.4	0.2
1	4.9	3.0	1.4	0.2
2	4.7	3.2	1.3	0.2
3	4.6	3.1	1.5	0.2
4	5.0	3.6	1.4	0.2
..
145	6.7	3.0	5.2	2.3
146	6.3	2.5	5.0	1.9
147	6.5	3.0	5.2	2.0
148	6.2	3.4	5.4	2.3
149	5.9	3.0	5.1	1.8

[150 rows x 5 columns]>

```
In [4]: iris.describe()
```

Out[4]:

	sepal_length	sepal_width	petal_length	petal_width
count	150.000000	150.000000	150.000000	150.000000
mean	5.843333	3.057333	3.758000	1.199333
std	0.828066	0.435866	1.765298	0.762238
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 [5]: `type(iris.sepal_length)`

Out[5]: `pandas.core.series.Series`

In [6]: `iris.sepal_length.dtype`

Out[6]: `dtype('float64')`

In [7]: `iris.sepal_width.dtype`

Out[7]: `dtype('float64')`

In [8]: `iris.petal_length.dtype`

Out[8]: `dtype('float64')`

In [9]: `iris.petal_width.dtype`

Out[9]: `dtype('float64')`

In [10]: `iris.species.dtype`

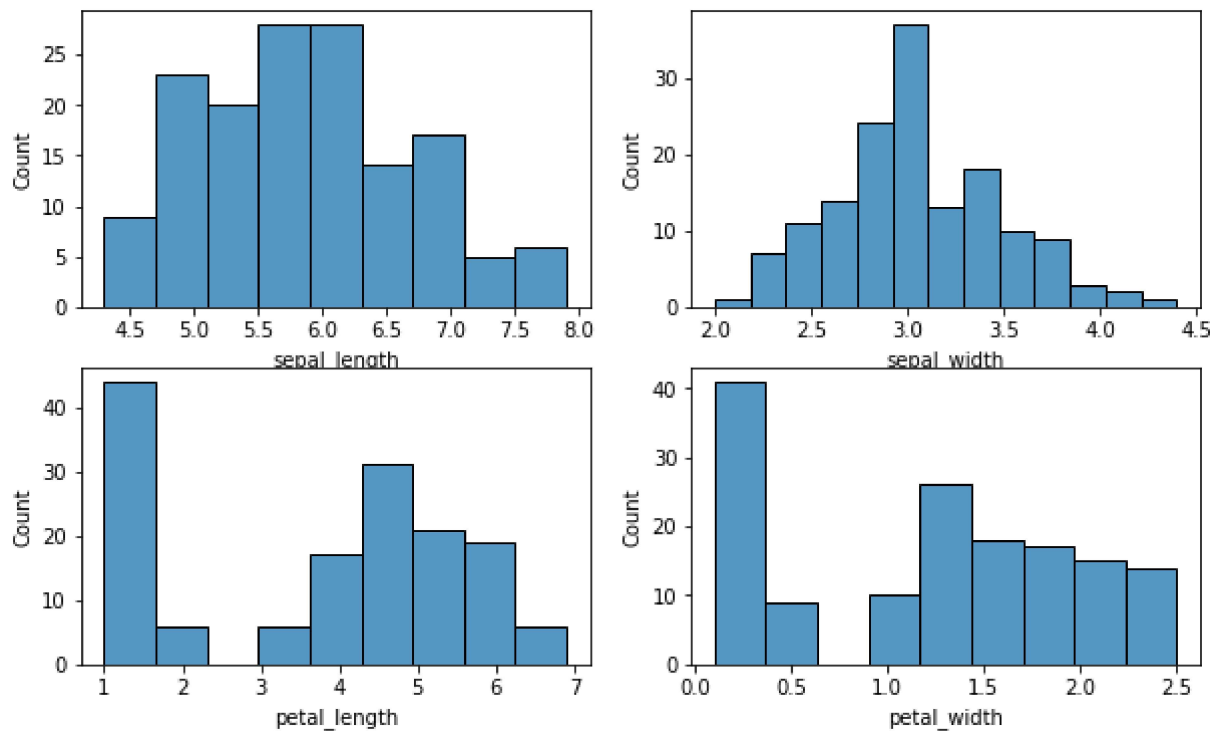
Out[10]: `dtype('O')`

In [11]: `iris.species.dtype`

Out[11]: `dtype('O')`

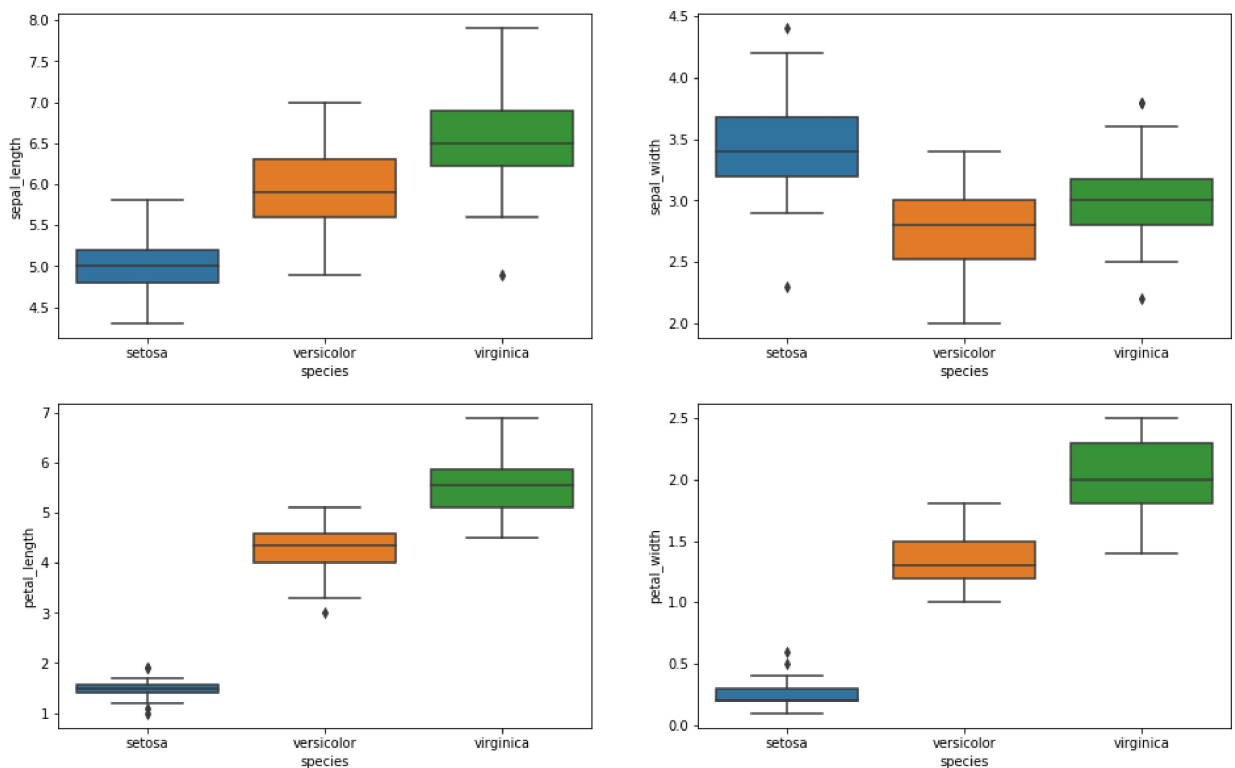
In [13]: `import matplotlib.pyplot as plt`
`fig, axes = plt.subplots(2, 2, figsize=(10, 6))`
`sns.histplot(iris["sepal_length"], ax=axes[0, 0])`
`sns.histplot(iris["sepal_width"], ax=axes[0, 1])`
`sns.histplot(iris["petal_length"], ax=axes[1, 0])`
`sns.histplot(iris["petal_width"], ax=axes[1, 1])`

Out[13]: `<matplotlib.axes._subplots.AxesSubplot at 0x7ffb39086090>`



```
In [14]: #For boxplot
fig, axes = plt.subplots(2, 2, figsize=(16, 10))
sns.boxplot(x="species", y="sepal_length", data=iris, ax=axes[0, 0])
sns.boxplot(x="species", y="sepal_width", data=iris, ax=axes[0, 1])
sns.boxplot(x="species", y="petal_length", data=iris, ax=axes[1, 0])
sns.boxplot(x="species", y="petal_width", data=iris, ax=axes[1, 1])
```

Out[14]: <matplotlib.axes._subplots.AxesSubplot at 0x7ffb38e8b690>



In []: