

```
In [12]: import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
import numpy as np
from sklearn.datasets import load_iris
```

```
In [13]: df=pd.read_csv("iris.csv")
print(df.head())
```

	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

```
In [14]: df.shape
```

```
Out[14]: (150, 5)
```

```
In [15]: df.loc[df['variety']=='Iris-virginica']
```

```
Out[15]:
```

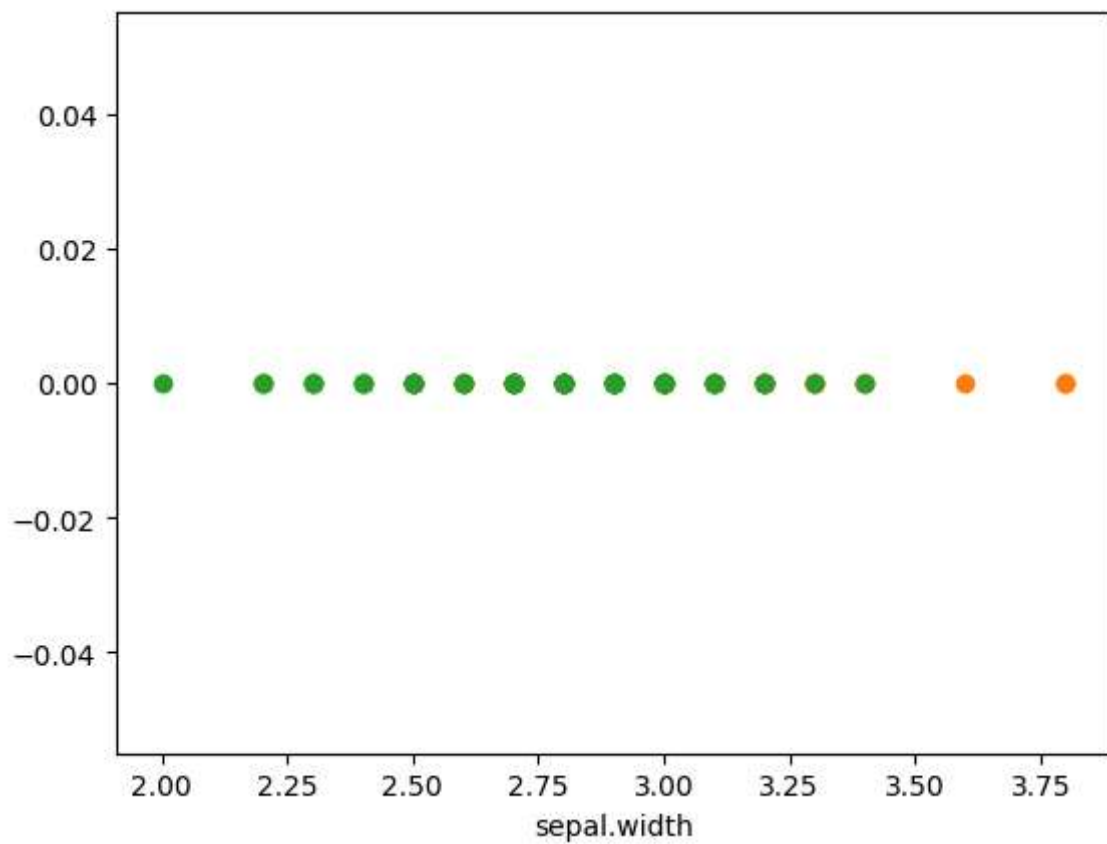
	sepal.length	sepal.width	petal.length	petal.width	variety
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```
In [16]: df_setosa=df.loc[df['variety']=='setosa']
```

```
In [17]: df_virginica=df.loc[df['variety']=='Virginica']
```

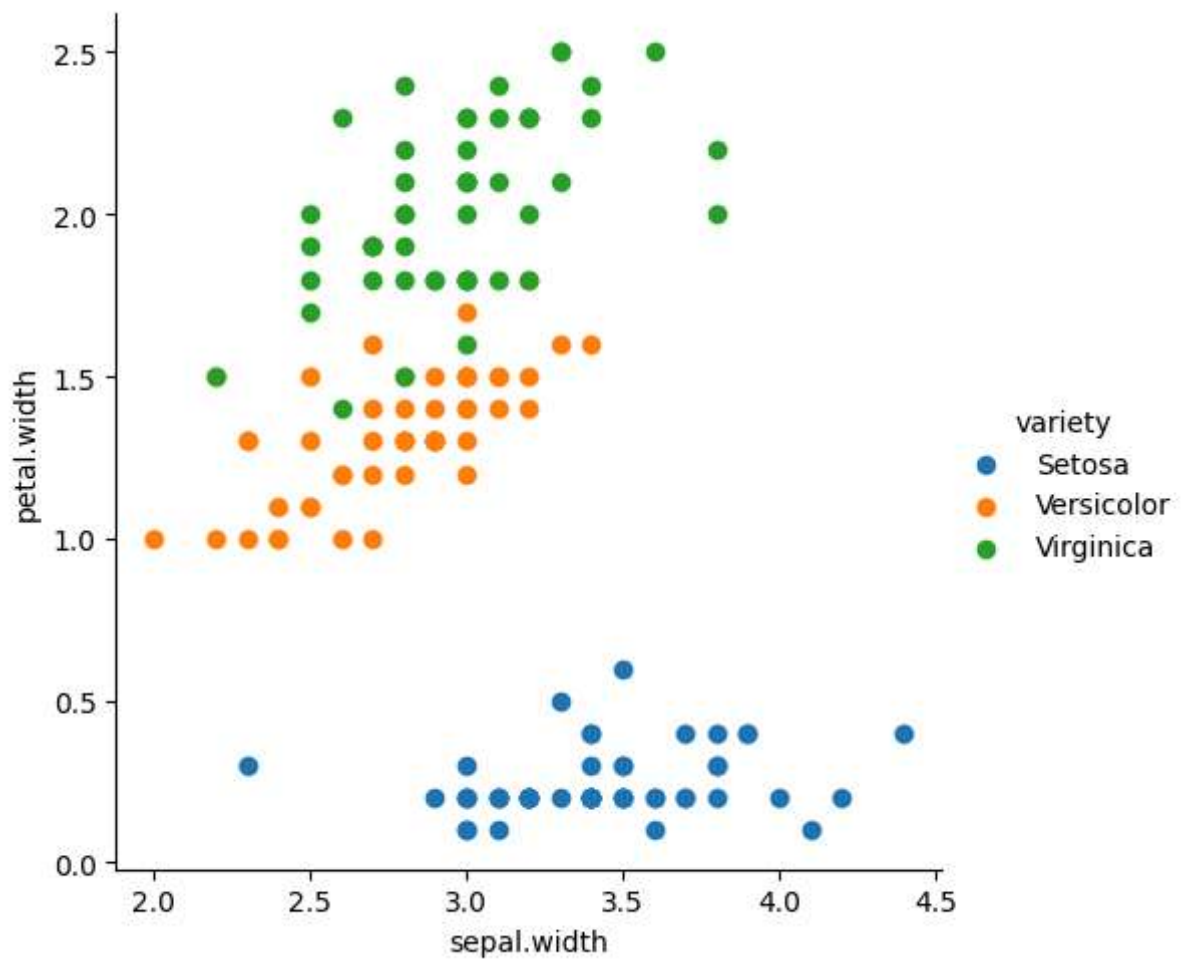
```
In [18]: df_versicolor=df.loc[df['variety']=='Versicolor']
```

```
In [19]: plt.scatter(df_setosa['sepal.width'],np.zeros_like(df_setosa['sepal.width']))
plt.scatter(df_virginica['sepal.width'],np.zeros_like(df_virginica['sepal.width']))
plt.scatter(df_versicolor['sepal.width'],np.zeros_like(df_versicolor['sepal.width']))
plt.xlabel('sepal.width')
plt.show()
```



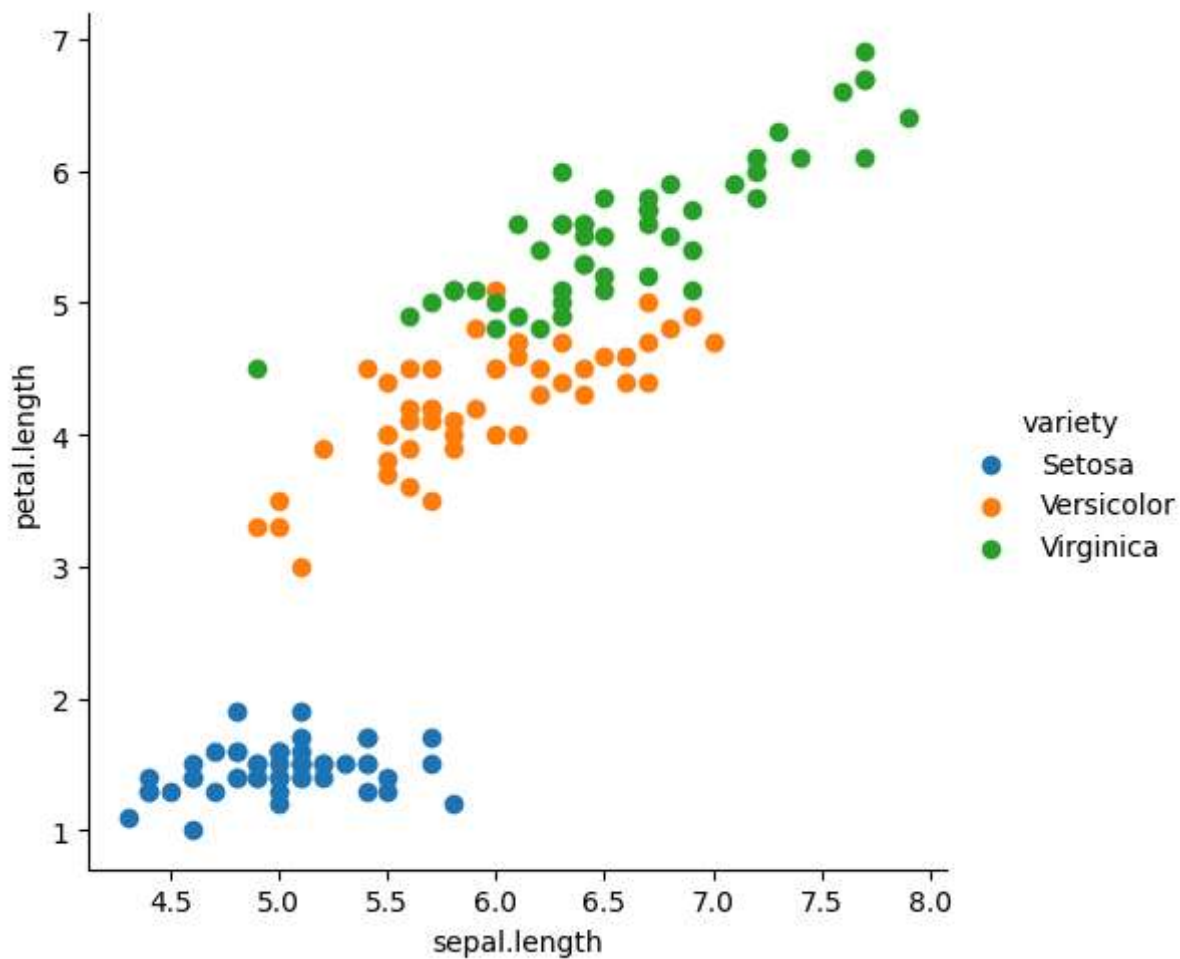
```
In [20]: sns.FacetGrid(df, hue = 'variety', height = 5).map(plt.scatter, "sepal.width", "petal.wi
```

```
Out[20]: <seaborn.axisgrid.FacetGrid at 0x183ff936c50>
```



```
In [21]: sns.FacetGrid(df, hue = 'variety', height = 5).map(plt.scatter, "sepal.length", "petal.l
```

```
Out[21]: <seaborn.axisgrid.FacetGrid at 0x183ff90bbd0>
```

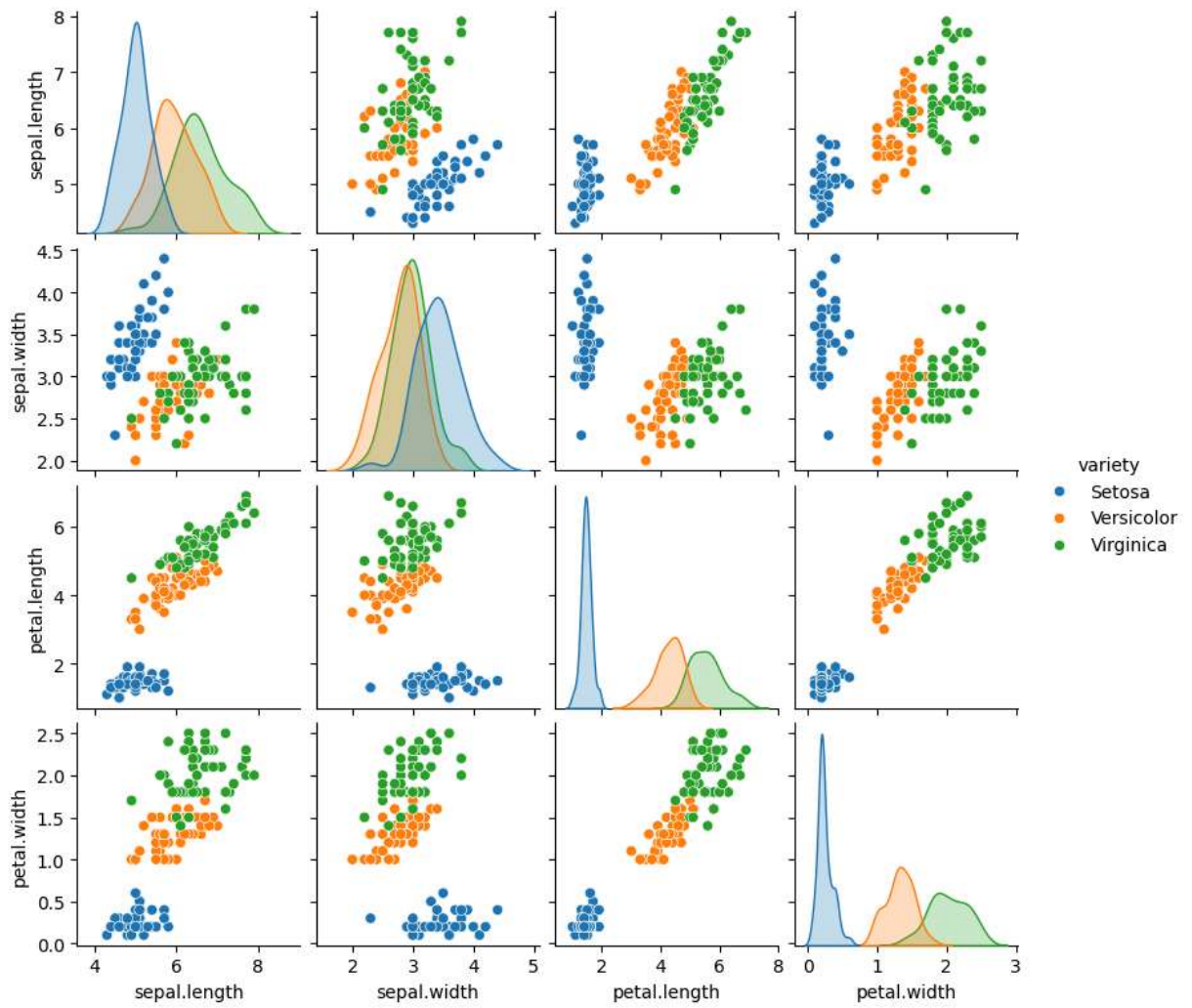


```
In [22]: sns.pairplot(df, hue="variety", size =2)
```

C:\Users\Manishaa\AppData\Local\Programs\Python\Python311\Lib\site-packages\seaborn\axisgrid.py:2100: UserWarning: The `size` parameter has been renamed to `height`; please update your code.

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

```
Out[22]: <seaborn.axisgrid.PairGrid at 0x183ff934d50>
```



In []: