assn10

May 22, 2023

[5]:
```
#Aishwarya kelgandre Roll no.73 batch T3
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
s1 =pd.Series(range(1,10,1))
s1
import seaborn as sns
df=sns.load_dataset('iris')
df
```

[5]:

	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 x 5 columns]

[6]:
```
df.columns
```

[6]:
```
Index(['sepal_length', 'sepal_width', 'petal_length', 'petal_width',
       'species'],
      dtype='object')
```

[7]:
```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 150 entries, 0 to 149
Data columns (total 5 columns):
 #   Column        Non-Null Count  Dtype
---  ------        --------------  -----
 0   sepal_length  150 non-null    float64
```

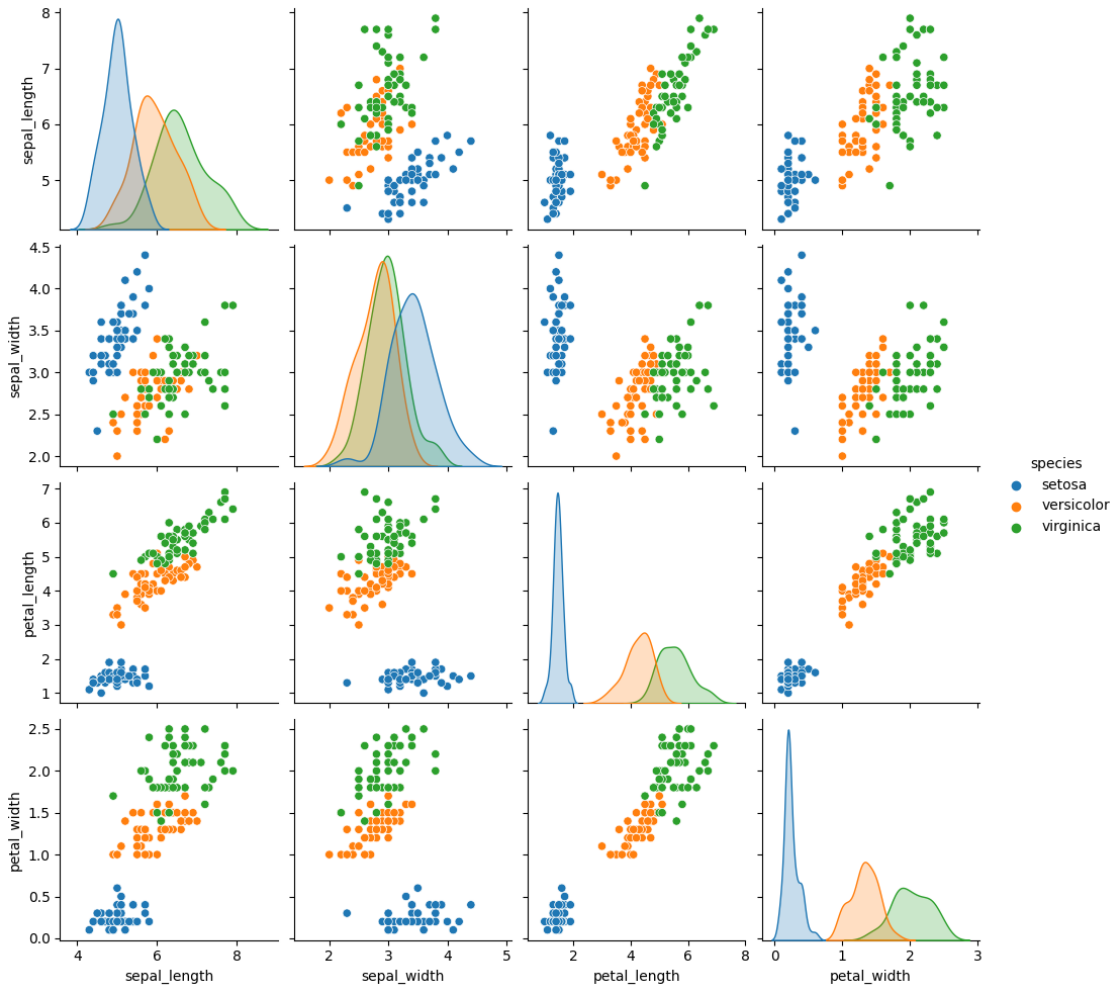
```
 1   sepal_width   150 non-null    float64
 2   petal_length  150 non-null    float64
 3   petal_width   150 non-null    float64
 4   species       150 non-null    object
dtypes: float64(4), object(1)
memory usage: 6.0+ KB
```

[8]:
```
df.dtypes
```

[8]:
```
sepal_length    float64
sepal_width     float64
petal_length    float64
petal_width     float64
species          object
dtype: object
```

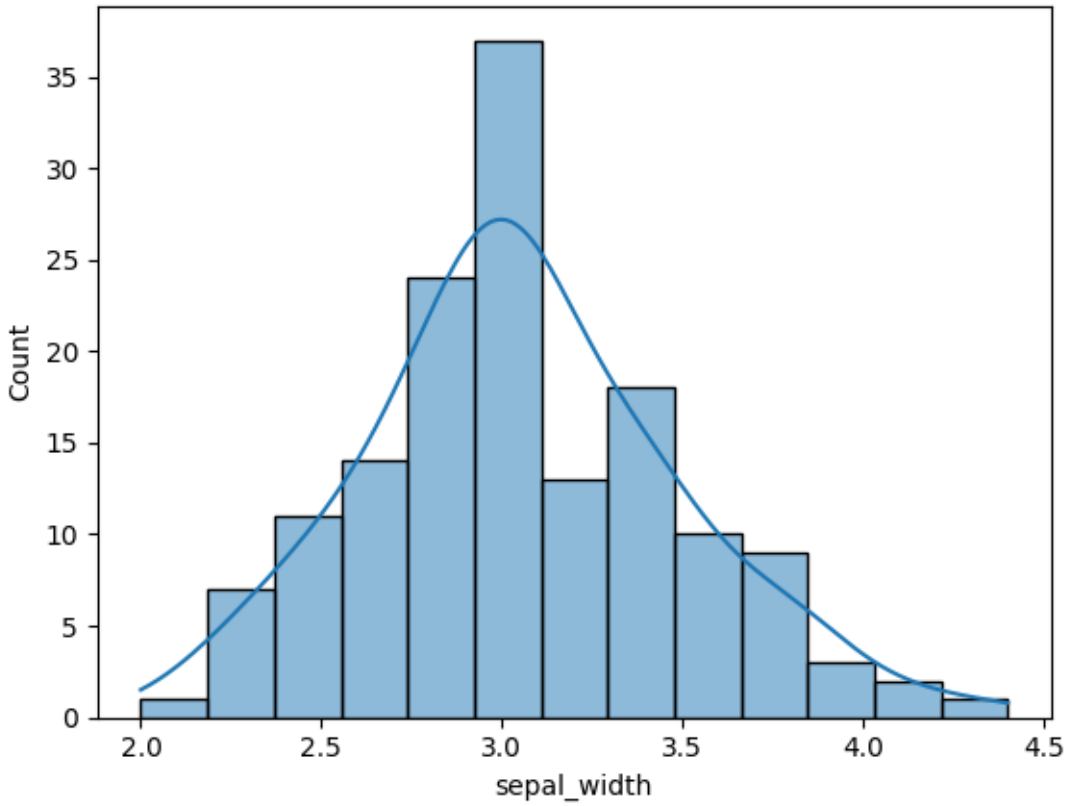
[11]:
```
sns.pairplot(df,hue="species")
```

[11]:
```
<seaborn.axisgrid.PairGrid at 0x1b63796d1d0>
```



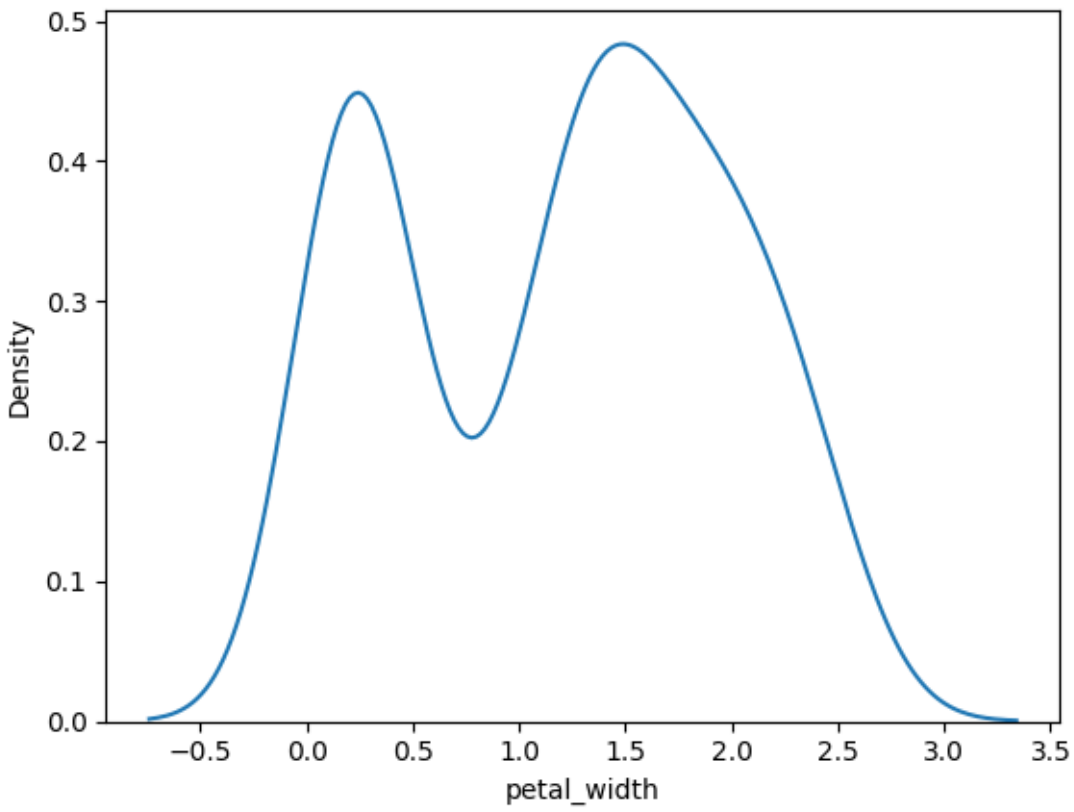
[12]:
```
sns.histplot(df['sepal_width'],kde=True)
```

[12]: <Axes: xlabel='sepal_width', ylabel='Count'>

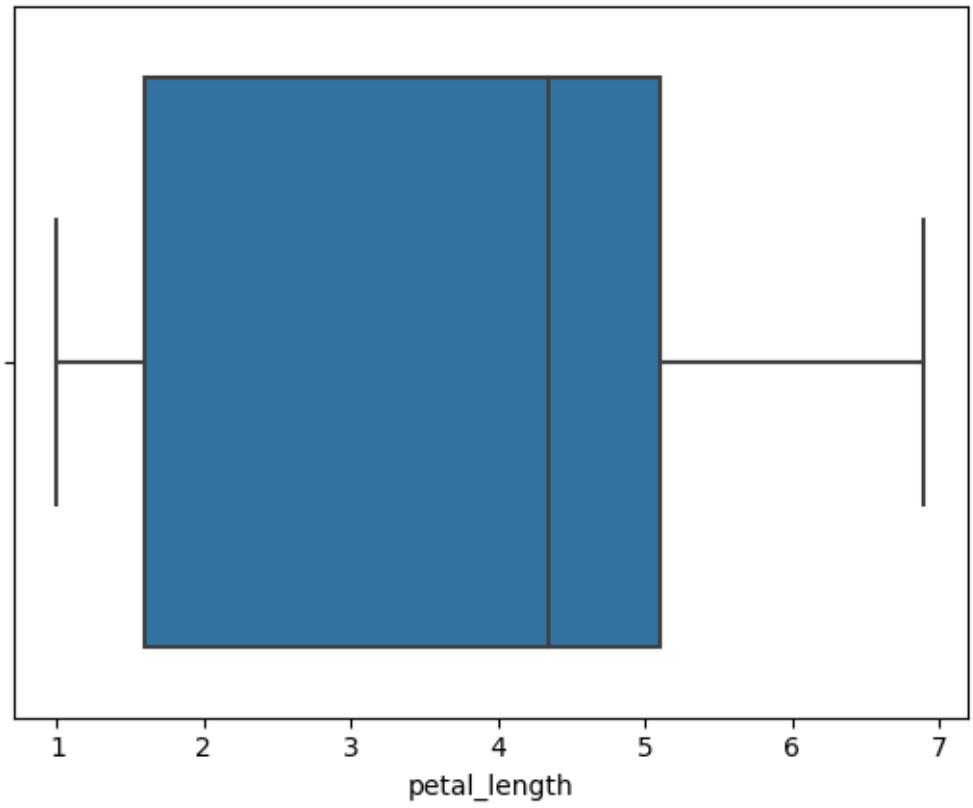


[13]:
```
sns.kdeplot(df['petal_width'])
```

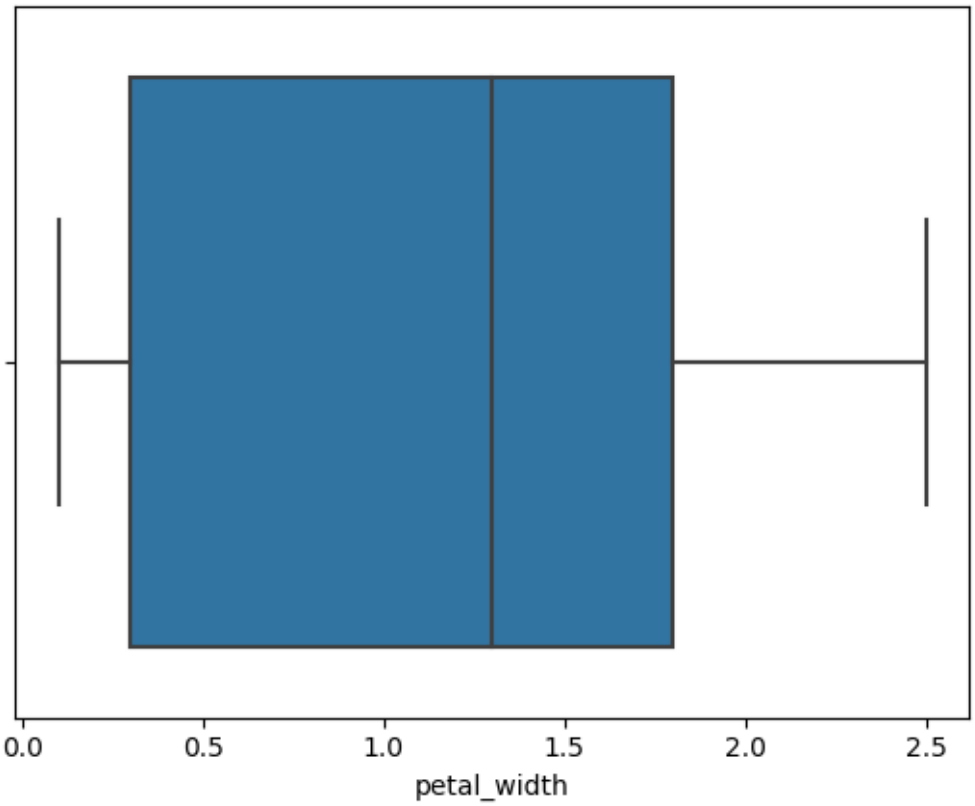
[13]: <Axes: xlabel='petal_width', ylabel='Density'>



[14]:
```
sns.boxplot(x=df['petal_length']);
```



[15]:
```
sns.boxplot(x=df['petal_width']);
```


0.0
0.5
1.0
1.5
2.0
2.5
petal_width

[ ]: