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

data = pd.read_csv('https://gist.githubusercontent.com/curran/a08a1080b88344b0c8a7/raw/0e7a9b0a5d22642a06d3d5b9bcbad9890c8ee534/iris.csv')
data
```

	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]

```python
data.head()
```

	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

```python
data.describe()
```

	sepal_length	sepal_width	petal_length	petal_width
count	150.000000	150.000000	150.000000	150.000000
mean	5.843333	3.054000	3.758667	1.198667
std	0.828066	0.433594	1.764420	0.763161
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

```python
data.describe(include = 'object')
```

	species
count	150
unique	3

```
top       setosa
freq          50
```

```
data.isnull().sum()
```

```
sepal_length    0
sepal_width     0
petal_length    0
petal_width     0
species         0
dtype: int64
```
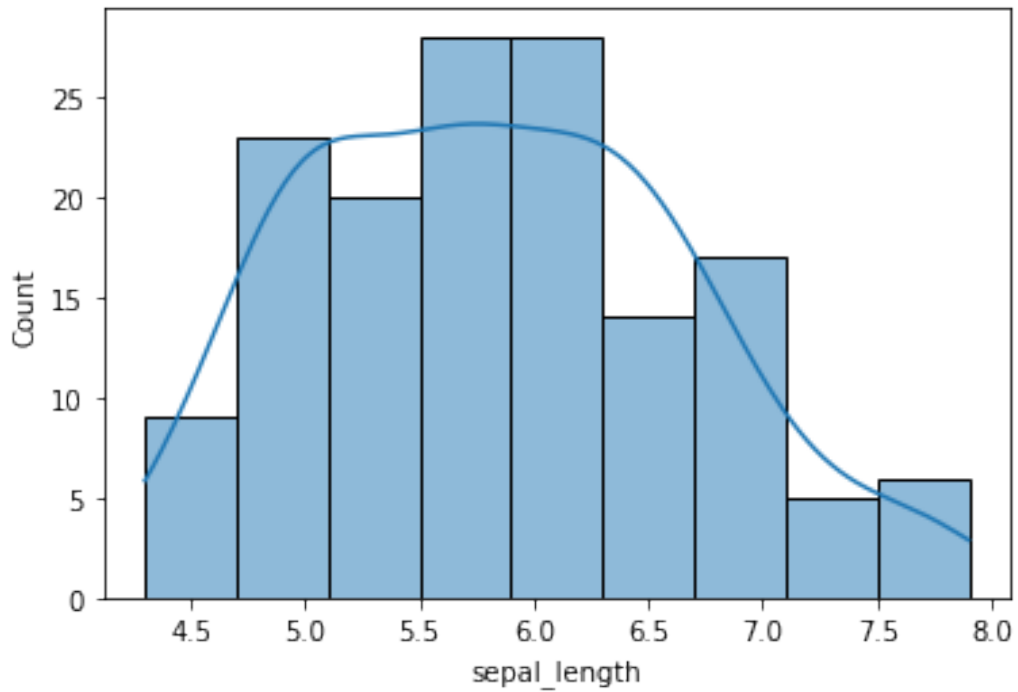
```python
print("\n\nThe features in the dataset are as follows : ")
print("1. Sepal length : ", data['sepal_length'].dtype)
print("2. Sepal width : ", data['sepal_width'].dtype)
print("3. Petal length : ", data['petal_length'].dtype)
print("4. Petal width : ", data['petal_width'].dtype)
print("5. Species : ", data['species'].dtype)
```

```
The features in the dataset are as follows :
1. Sepal length :  float64
2. Sepal width :  float64
3. Petal length :  float64
4. Petal width :  float64
5. Species :  object
```

```python
sns.histplot(x = data['sepal_length'], kde=True)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7fe839f4d9d0>
```

```
sns.histplot(x = data['sepal_width'], kde=True)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7fe839343e90>
```
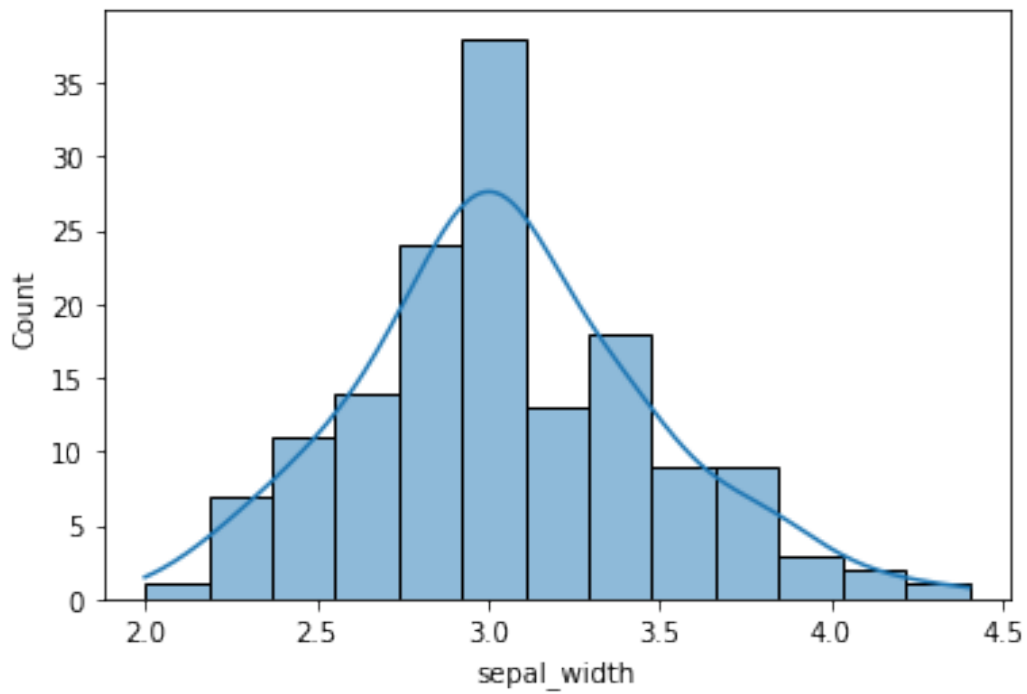


```
sns.histplot(x = data['petal_length'], kde=True)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7fe836d341d0>
```
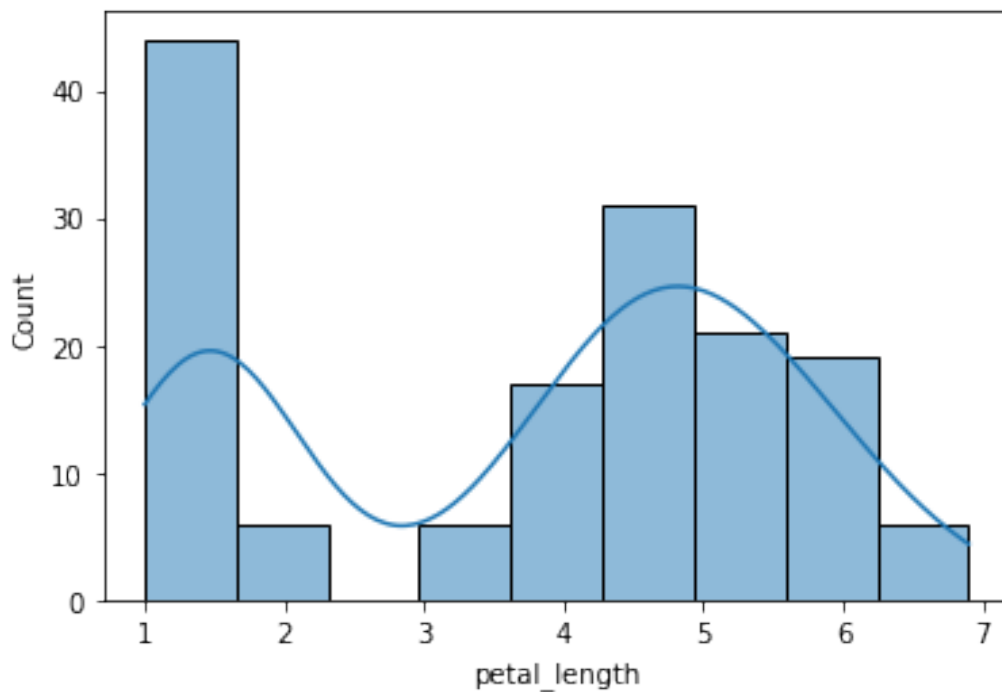


```
sns.histplot(x = data['petal_width'], kde=True)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7fe836c64f50>
```
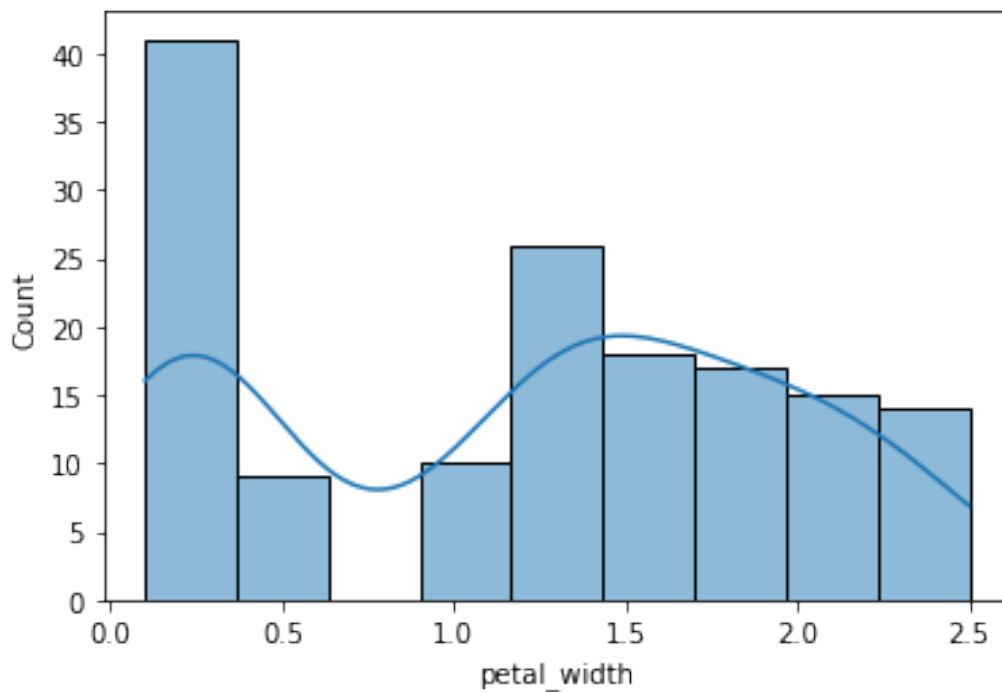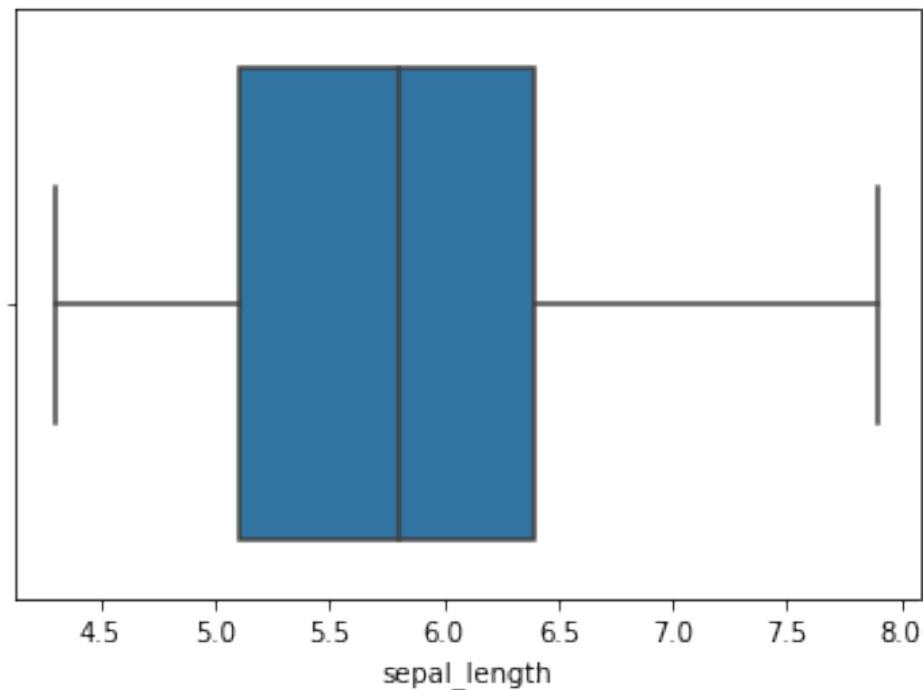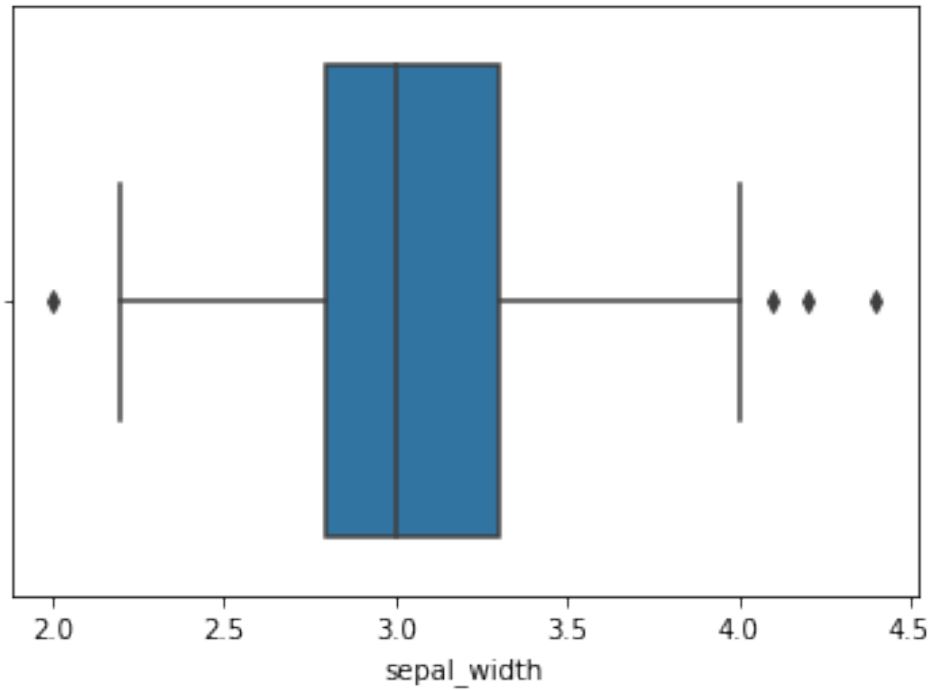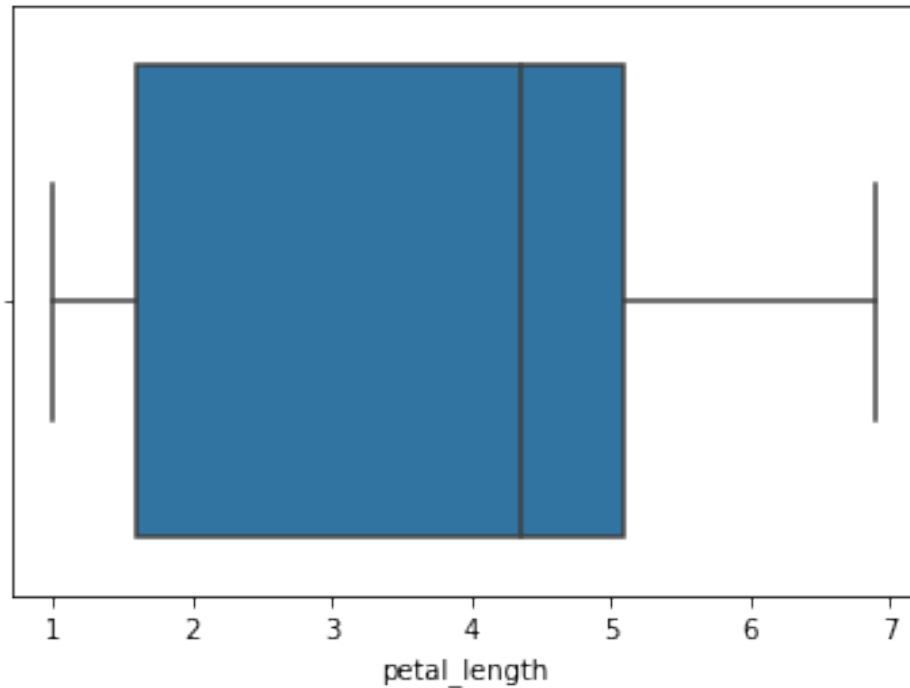
```
sns.boxplot(data['sepal_length'])
```

/usr/local/lib/python3.7/dist-packages/seaborn/_decorators.py:43:
FutureWarning: Pass the following variable as a keyword arg: x. From
version 0.12, the only valid positional argument will be `data`, and
passing other arguments without an explicit keyword will result in an
error or misinterpretation.
   FutureWarning

<matplotlib.axes._subplots.AxesSubplot at 0x7fe836b8a8d0>


```
sns.boxplot(data['sepal_width'])
```

/usr/local/lib/python3.7/dist-packages/seaborn/_decorators.py:43:
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   FutureWarning

<matplotlib.axes._subplots.AxesSubplot at 0x7fe836c79ed0>

```
sns.boxplot(data['petal_length'])
```

```
/usr/local/lib/python3.7/dist-packages/seaborn/_decorators.py:43:
FutureWarning: Pass the following variable as a keyword arg: x. From
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error or misinterpretation.
  FutureWarning

<matplotlib.axes._subplots.AxesSubplot at 0x7fe836bf8290>
```

```
sns.boxplot(data['petal_width'])
```
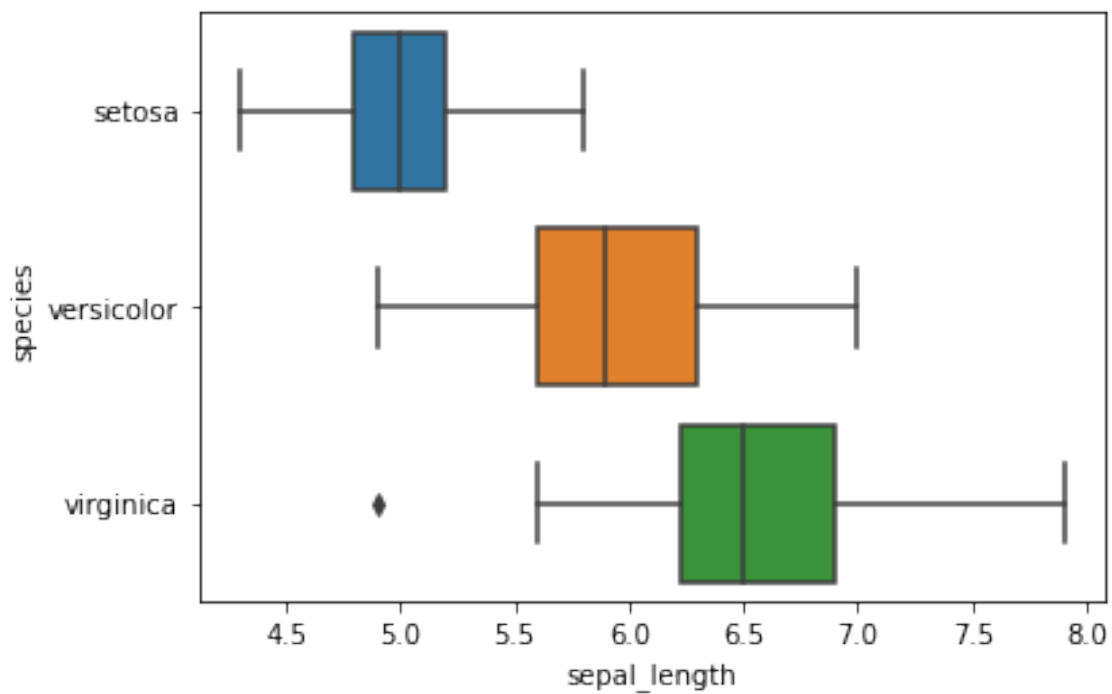
```
/usr/local/lib/python3.7/dist-packages/seaborn/_decorators.py:43:
FutureWarning: Pass the following variable as a keyword arg: x. From
version 0.12, the only valid positional argument will be `data`, and
passing other arguments without an explicit keyword will result in an
error or misinterpretation.
  FutureWarning

<matplotlib.axes._subplots.AxesSubplot at 0x7fe836a5f850>
```
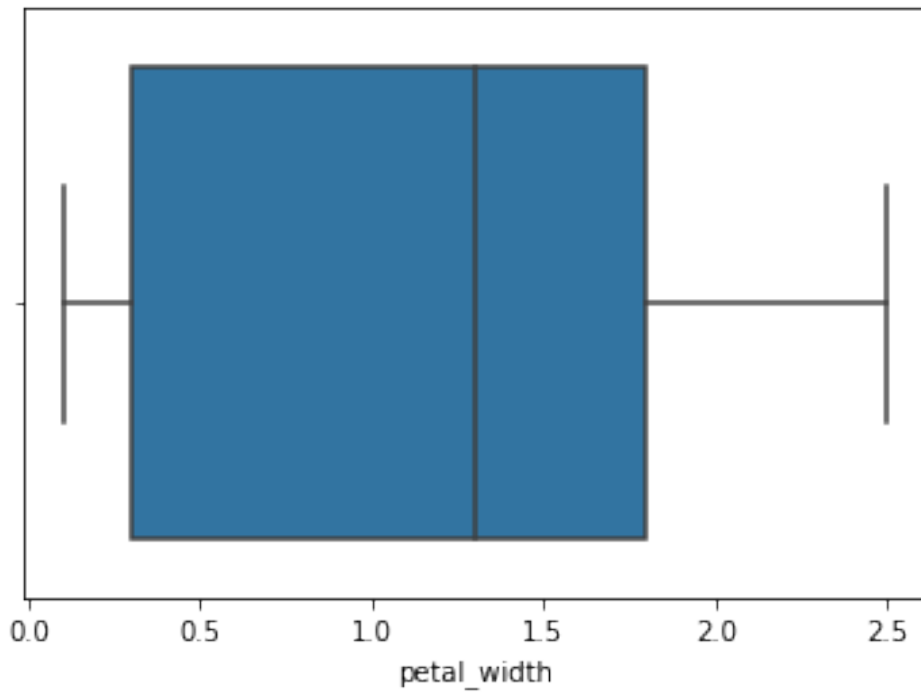
```
sns.boxplot(x='sepal_length',y='species',data=data)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7fe836a3ca90>
```



```
sns.boxplot(x='petal_length',y='species',data=data)
```

<matplotlib.axes._subplots.AxesSubplot at 0x7fe83696b950>