In [1]:

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

This is the "Iris" dataset. Originally published at UCI Machine Learning Repository: Iris Data Set, this small dataset from 1936 is often used for testing out machine learning algorithms and visualizations (for example, Scatter Plot). Each row of the table represents an iris flower, including its species and dimensions of its botanical parts, sepal and petal, in centimeters.

In [2]:

```python
data = pd.read_csv('iris.csv')
data.head()
```

Out[2]:

	sepal_length	sepal_width	petal_length	petal_width	class
0	5.1	3.5	1.4	0.2	Iris-setosa
1	4.9	3.0	1.4	0.2	Iris-setosa
2	4.7	3.2	1.3	0.2	Iris-setosa
3	4.6	3.1	1.5	0.2	Iris-setosa
4	5.0	3.6	1.4	0.2	Iris-setosa

In [3]:

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

Out[3]:

	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

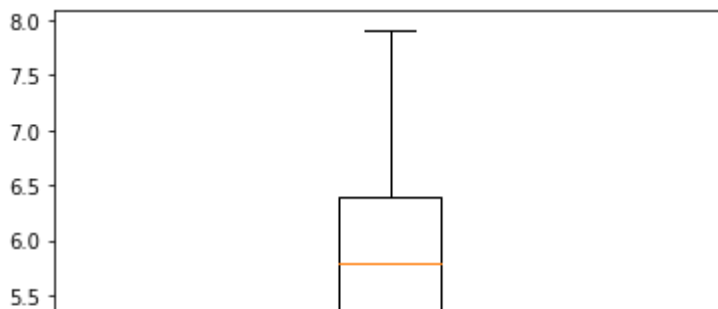Create a boxplot for each feature in the dataset.

In [4]:

```
plt.boxplot(data['sepal_length'])
```

Out[4]:

```
{'boxes': [<matplotlib.lines.Line2D at 0x7f7671969780>],
 'caps': [<matplotlib.lines.Line2D at 0x7f7671969f98>,
  <matplotlib.lines.Line2D at 0x7f76699002b0>],
 'fliers': [<matplotlib.lines.Line2D at 0x7f7669900860>],
 'means': [],
 'medians': [<matplotlib.lines.Line2D at 0x7f7669900588>],
 'whiskers': [<matplotlib.lines.Line2D at 0x7f76719699e8>,
  <matplotlib.lines.Line2D at 0x7f7671969c88>]}
```


In [5]:

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

Out[5]:

```
{'boxes': [<matplotlib.lines.Line2D at 0x7f7669863e80>],
 'caps': [<matplotlib.lines.Line2D at 0x7f76697f26d8>,
  <matplotlib.lines.Line2D at 0x7f76697f29b0>],
 'fliers': [<matplotlib.lines.Line2D at 0x7f76697f2f60>],
 'means': [],
 'medians': [<matplotlib.lines.Line2D at 0x7f76697f2c88>],
 'whiskers': [<matplotlib.lines.Line2D at 0x7f76697f2128>,
  <matplotlib.lines.Line2D at 0x7f76697f2400>]}
```

In [6]:

```
plt.boxplot(data['petal_width'])
```

Out[6]:

```
{'boxes': [<matplotlib.lines.Line2D at 0x7f76697cbda0>],
 'caps': [<matplotlib.lines.Line2D at 0x7f76697db588>,
  <matplotlib.lines.Line2D at 0x7f76697db860>],
 'fliers': [<matplotlib.lines.Line2D at 0x7f76697dbe10>],
 'means': [],
 'medians': [<matplotlib.lines.Line2D at 0x7f76697dbb38>],
 'whiskers': [<matplotlib.lines.Line2D at 0x7f76697db048>,
  <matplotlib.lines.Line2D at 0x7f76697db2e8>]}
```
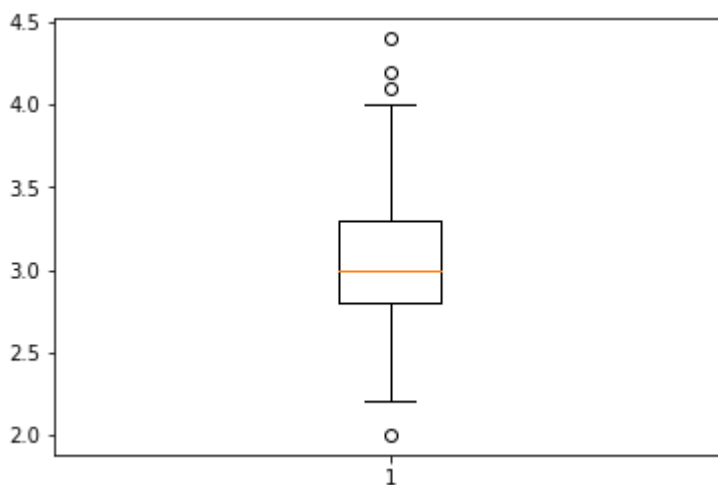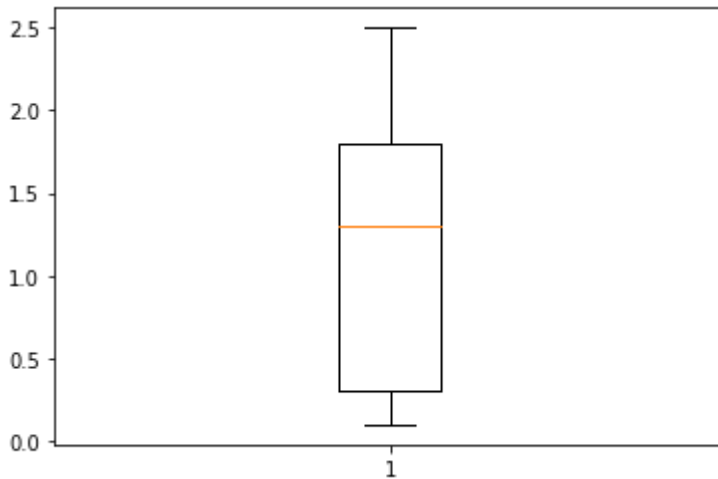

In [7]:

```
plt.boxplot(data['petal_length'])
```
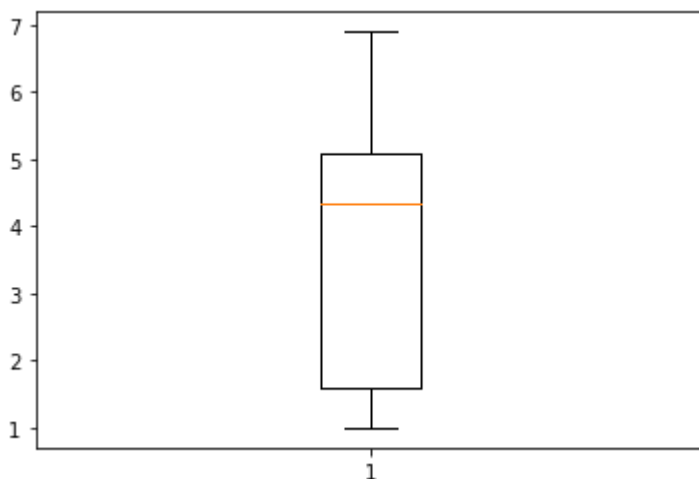
Out[7]:

```
{'boxes': [<matplotlib.lines.Line2D at 0x7f766973ac18>],
 'caps': [<matplotlib.lines.Line2D at 0x7f766974a470>,
  <matplotlib.lines.Line2D at 0x7f766974a748>],
 'fliers': [<matplotlib.lines.Line2D at 0x7f766974acc0>],
 'means': [],
 'medians': [<matplotlib.lines.Line2D at 0x7f766974aa20>],
 'whiskers': [<matplotlib.lines.Line2D at 0x7f766973ae80>,
  <matplotlib.lines.Line2D at 0x7f766974a198>]}
```
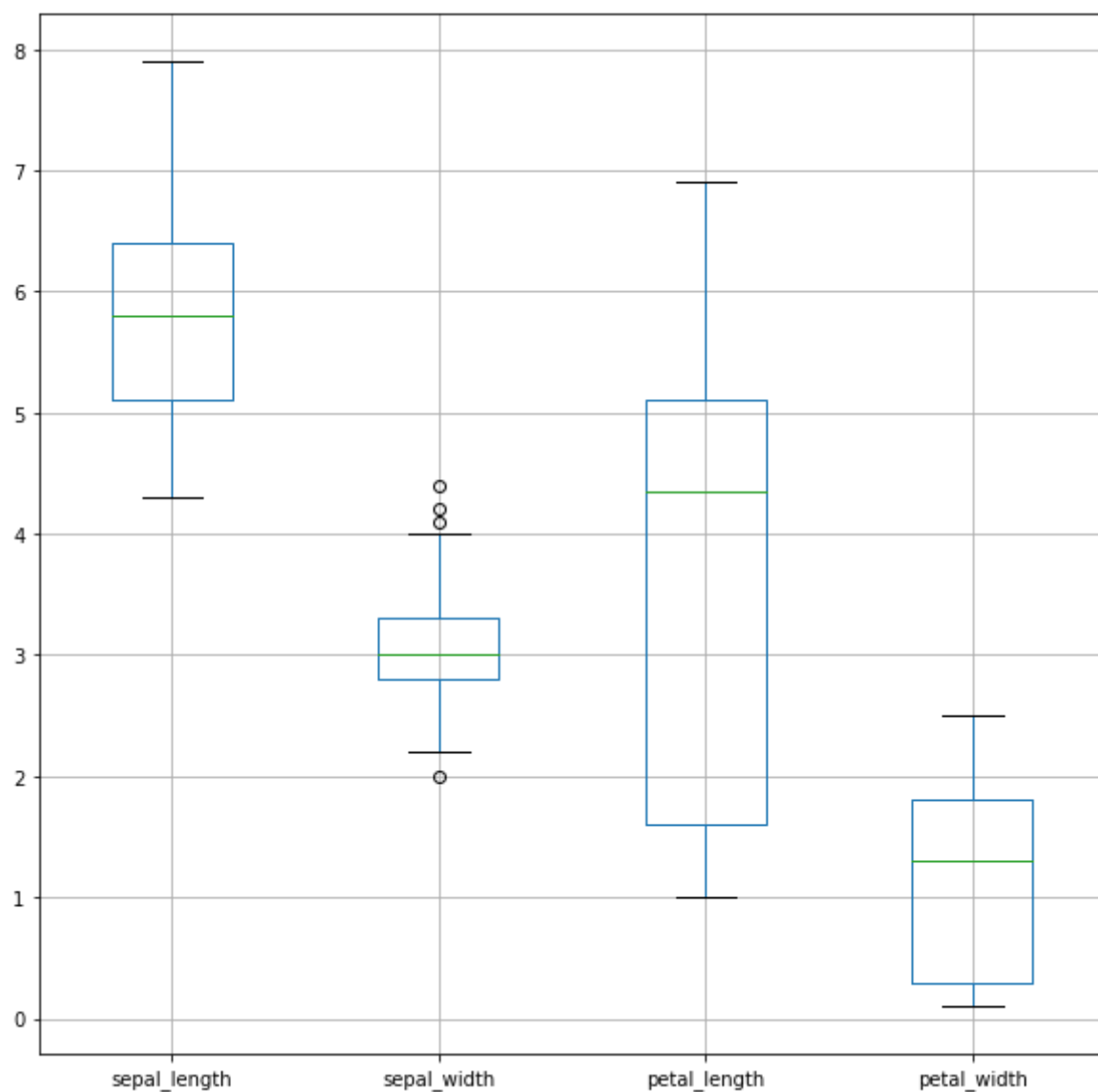
In [8]:

```
data.boxplot(figsize=[10,10], grid=True)
```

Out[8]:

<AxesSubplot:>

Create a histogram for each feature

In [9]:

```
data.hist(figsize=[15,15], grid=True)
```

Out[9]:

```
array([[<AxesSubplot:title={'center':'sepal_length'}>,
        <AxesSubplot:title={'center':'sepal_width'}>],
       [<AxesSubplot:title={'center':'petal_length'}>,
        <AxesSubplot:title={'center':'petal_width'}>]], dtype=object)
```