In [1]:
```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

In [2]:
```
df = pd.read_csv('IRIS.csv')
```

In [3]:
```
df.head()
```

Out[3]:

	sepal_length	sepal_width	petal_length	petal_width	species
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 [4]:
```
df.mean()
```

Out[4]:
```
sepal_length    5.843333
sepal_width     3.054000
petal_length    3.758667
petal_width     1.198667
dtype: float64
```

In [5]:
```
df.median()
```

Out[5]:
```
sepal_length    5.80
sepal_width     3.00
petal_length    4.35
petal_width     1.30
dtype: float64
```

In [6]:
```
df.mode()
```

Out[6]:

	sepal_length	sepal_width	petal_length	petal_width	species
0	5.0	3.0	1.5	0.2	Iris-setosa
1	NaN	NaN	NaN	NaN	Iris-versicolor
2	NaN	NaN	NaN	NaN	Iris-virginica

In [7]:
```
df.min()
```

Out[7]:
```
sepal_length            4.3
sepal_width               2
petal_length              1
petal_width             0.1
species         Iris-setosa
dtype: object
```

In [8]:
```
df.max()
```

Out[8]:
```
sepal_length              7.9
sepal_width               4.4
petal_length              6.9
petal_width               2.5
species         Iris-virginica
dtype: object
```

In [9]:
```
df.std()
```

Out[9]:
```
sepal_length    0.828066
sepal_width     0.433594
petal_length    1.764420
petal_width     0.763161
dtype: float64
```

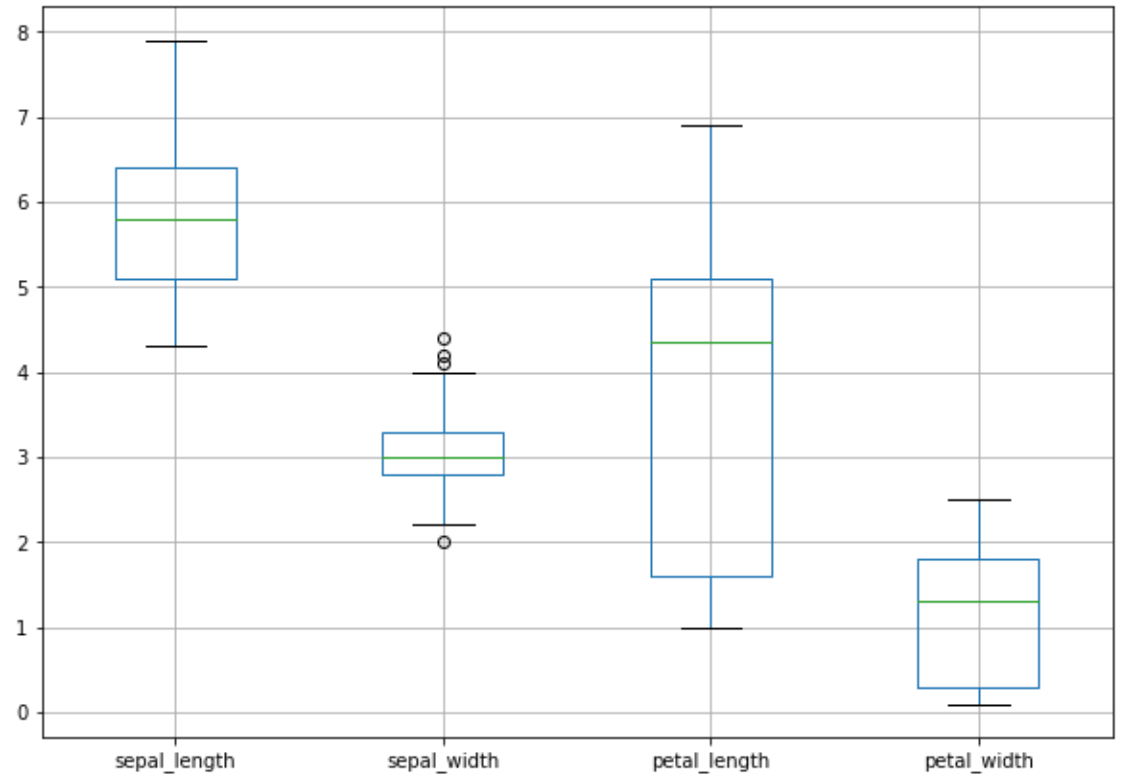
In [10]:
```
df.var()
```

Out[10]:
```
sepal_length    0.685694
sepal_width     0.188004
petal_length    3.113179
petal_width     0.582414
dtype: float64
```

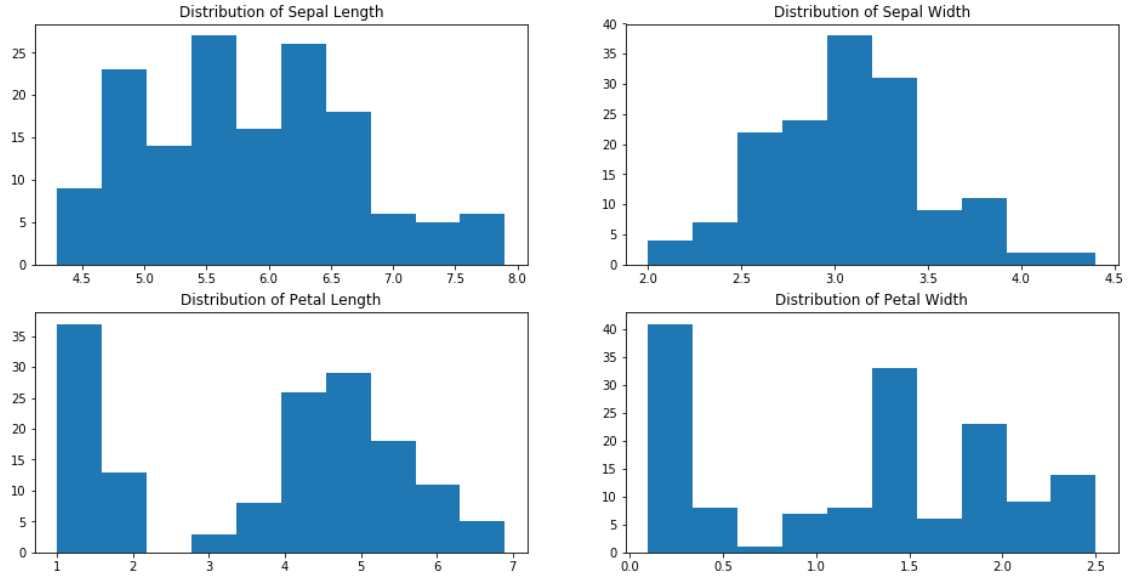
In [11]:
```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 150 entries, 0 to 149
Data columns (total 5 columns):
sepal_length    150 non-null float64
sepal_width     150 non-null float64
petal_length    150 non-null float64
petal_width     150 non-null float64
species         150 non-null object
dtypes: float64(4), object(1)
memory usage: 5.9+ KB
```

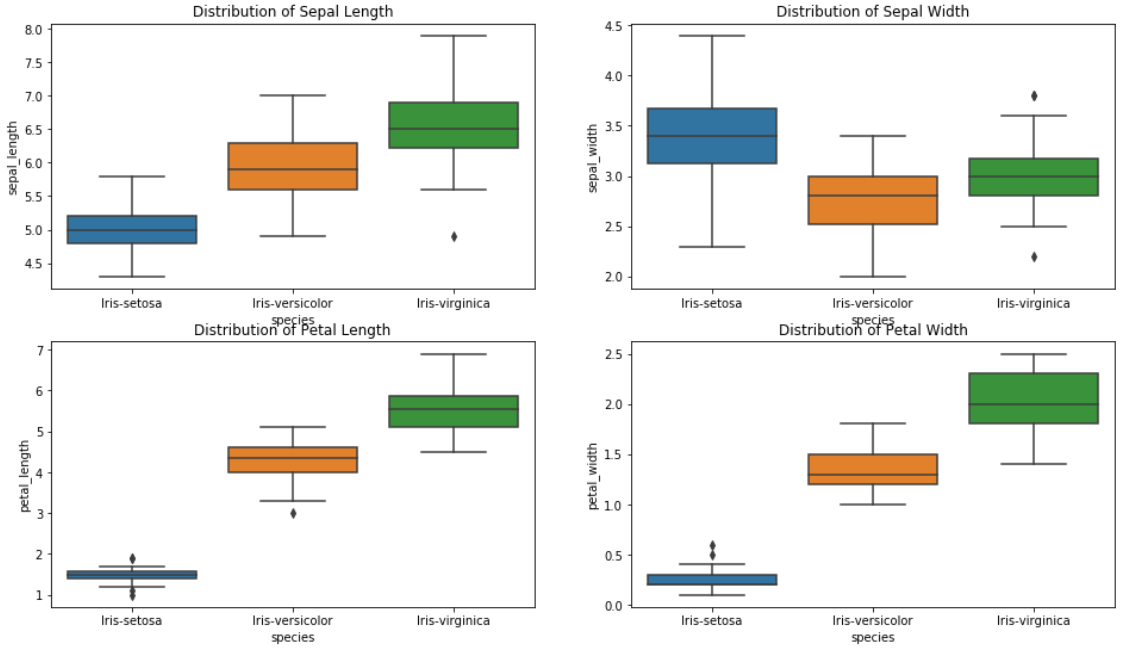
In [12]:
```
plt.figure(figsize = (10,7))
df.boxplot()
plt.show()
```



In [13]:
```
fig, axes = plt.subplots(2, 2, figsize=(16,8))

axes[0,0].set_title("Distribution of Sepal Length")
axes[0,0].hist(df["sepal_length"]);

axes[0,1].set_title("Distribution of Sepal Width")
axes[0,1].hist(df["sepal_width"]);

axes[1,0].set_title("Distribution of Petal Length")
axes[1,0].hist(df["petal_length"]);

axes[1,1].set_title("Distribution of Petal Width")
axes[1,1].hist(df["petal_width"]);

plt.show()
```



In [14]:
```
fig, axes = plt.subplots(2, 2, figsize=(16,9))

axes[0,0].set_title("Distribution of Sepal Length")
sns.boxplot(y="sepal_length", x="species", data=df, orient='v', ax=a

axes[0,1].set_title("Distribution of Sepal Width")
sns.boxplot(y="sepal_width", x="species", data=df, orient='v', ax=ax

axes[1,0].set_title("Distribution of Petal Length")
sns.boxplot(y="petal_length", x="species", data=df, orient='v', ax=a

axes[1,1].set_title("Distribution of Petal Width")
sns.boxplot(y="petal_width", x="species", data=df, orient='v', ax=ax

plt.show()
```



In [ ]: