

```
import seaborn as sns
import pandas as pd
import matplotlib.pyplot as plt
```

```
iris = sns.load_dataset('iris')
```

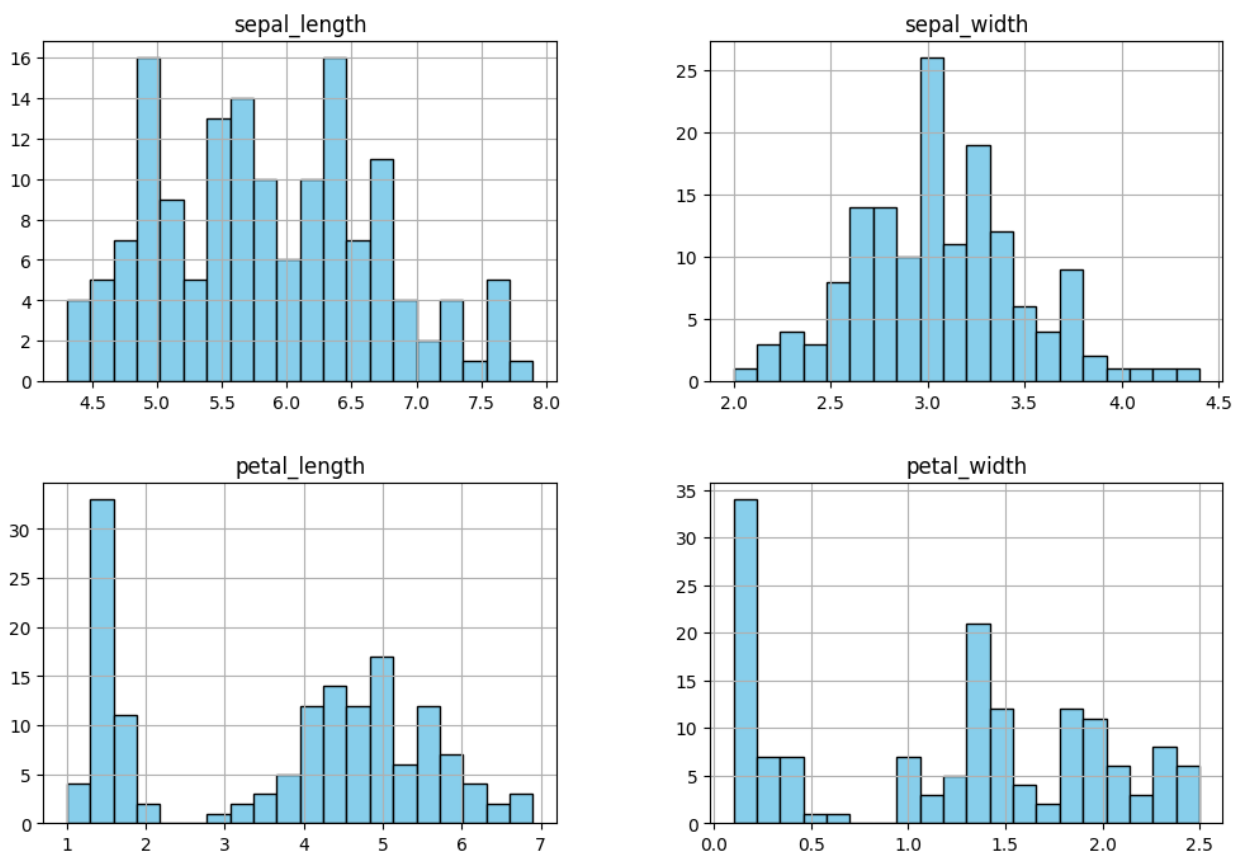
```
iris.head()
```

	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

```
# plot the histogram
```

```
iris.hist(bins = 20 , figsize = (12,8) , color = 'skyblue',edgecolor =
'black')
plt.suptitle('Feature Distributions = Iris Dataset' ,fontsize = 16)
plt.show()
```

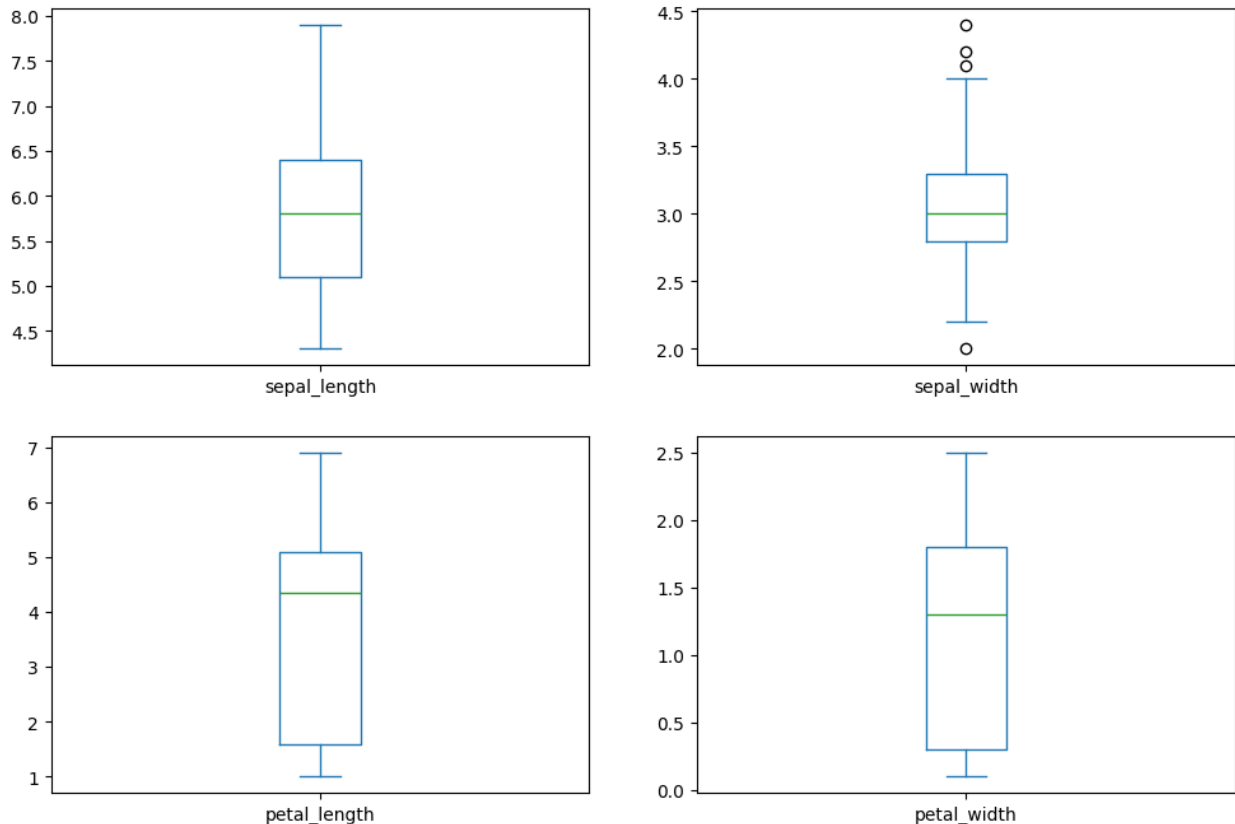
Feature Distributions = Iris Dataset



```
#plot boxplot
```

```
iris.plot(kind = 'box' , subplots = True , layout = (2,2) , figsize =  
(12,8),sharex=False,sharey = False)  
plt.suptitle('Boxplots of Features - Iris Dataset',fontsize = 16)  
plt.show()
```

Boxplots of Features - Iris Dataset



```
def detect_outliers_iqr(column):  
    Q1 = column.quantile(0.25)  
    Q3 = column.quantile(0.75)  
    IQR = Q3 - Q1  
    lower = Q1 - 1.5 * IQR  
    upper = Q3 + 1.5 * IQR  
    return column[(column<lower) | (column>upper)]  
  
for col in iris.columns[:-1]: # skip 'species '  
    outliers= detect_outliers_iqr(iris[col])  
    print(f"\nOutliers in {col}:")  
    print (outliers.to_string (index=False))
```

```
Outliers in sepal_length:  
Series([], )
```

```
Outliers in sepal_width:  
4.4  
4.1  
4.2  
2.0
```

```
Outliers in petal_length:  
Series([], )
```

```
Outliers in petal_width:  
Series([], )
```