

```
import numpy as np
import pandas as pd
df = pd.read_csv(r'/content/iris.csv', names=['col1','col2','col3','col4','col5'])

df.head()
```

	col1	col2	col3	col4	col5
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

```
column = len(list(df))
column

5
```

```
df.info()

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 150 entries, 0 to 149
Data columns (total 5 columns):
#   Column      Non-Null Count  Dtype
---  -
0   col1        150 non-null    float64
1   col2        150 non-null    float64
2   col3        150 non-null    float64
3   col4        150 non-null    float64
4   col5        150 non-null    object
dtypes: float64(4), object(1)
memory usage: 6.0+ KB
```

```
np.unique(df['col5'])

array(['Setosa', 'Versicolor', 'Virginica'], dtype=object)
```

```
import seaborn as sns
import matplotlib.pyplot as plt
%matplotlib inline
```

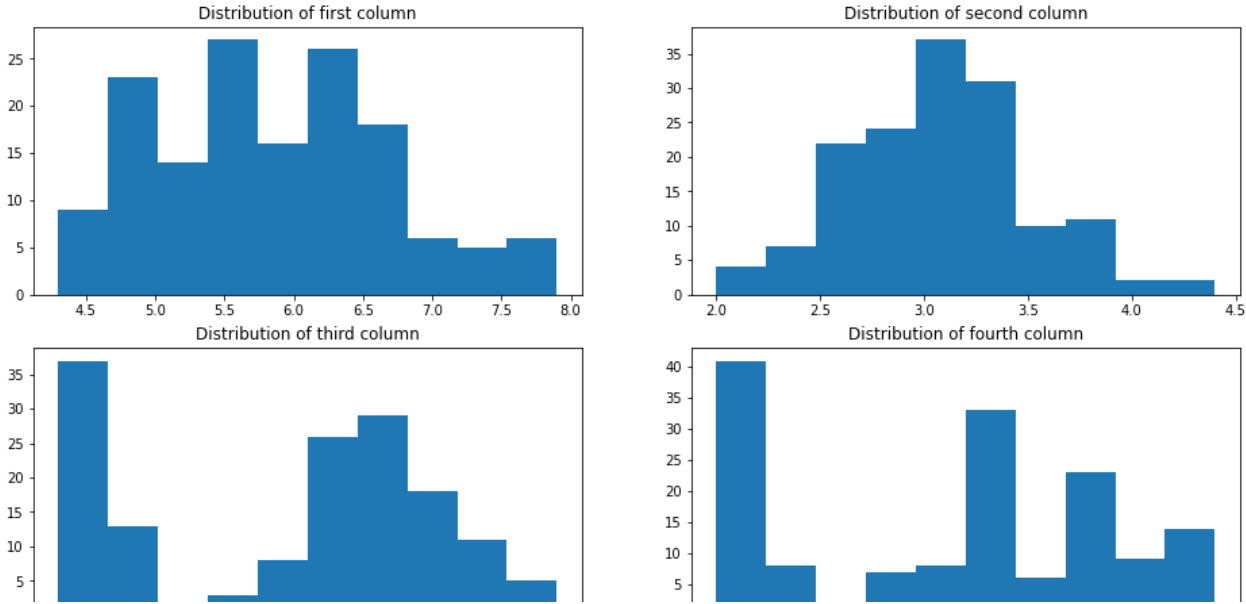
```
fig, axes = plt.subplots(2, 2, figsize=(16, 8))
axes[0, 0].set_title("Distribution of first column")
axes[0, 0].hist(df["col1"])

axes[0, 1].set_title("Distribution of second column")
axes[0, 1].hist(df["col2"])

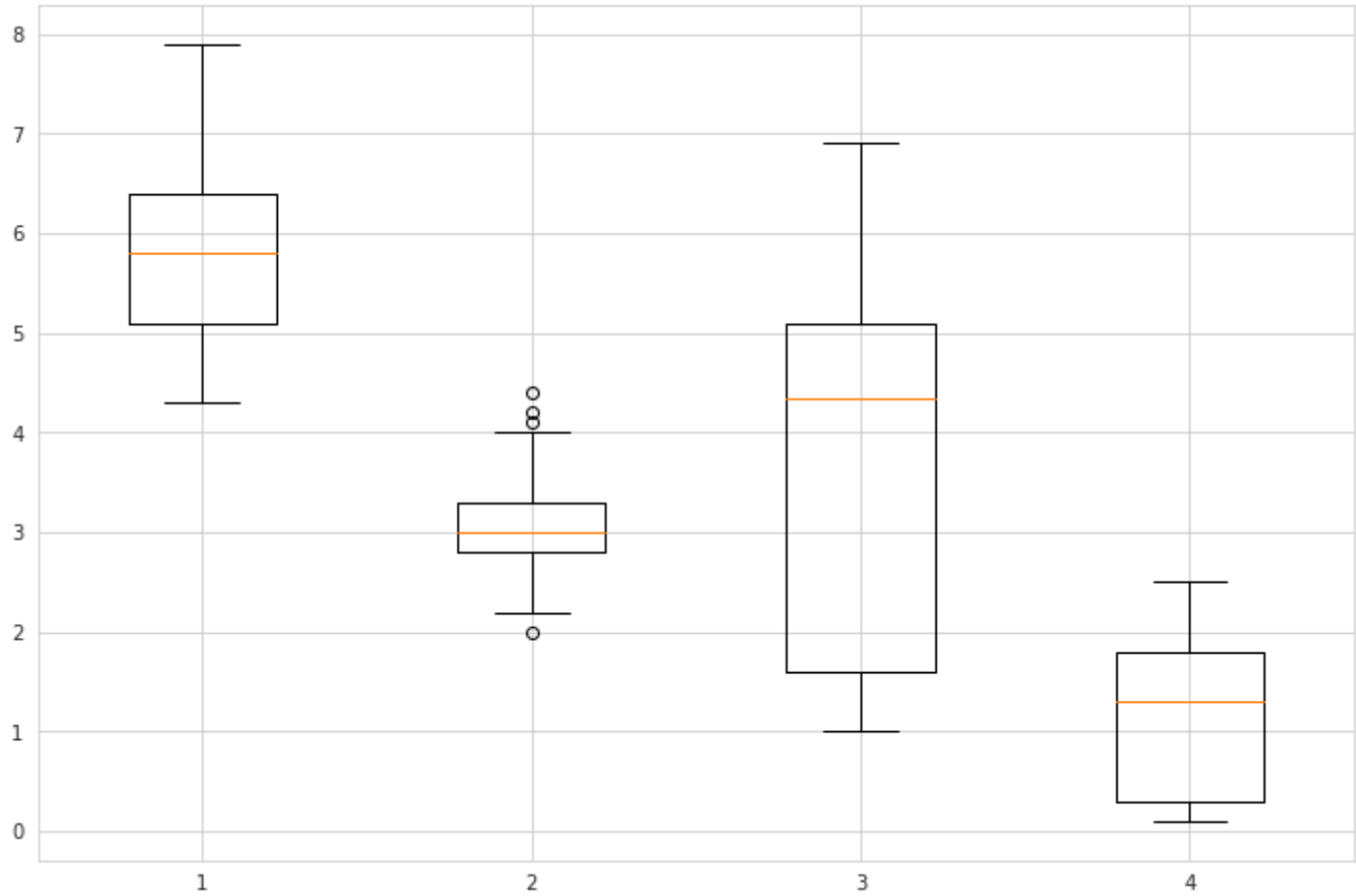
axes[1, 0].set_title("Distribution of third column")
axes[1, 0].hist(df["col3"])

axes[1, 1].set_title("Distribution of fourth column")
axes[1, 1].hist(df["col4"])
```

```
(array([41.,  8.,  1.,  7.,  8., 33.,  6., 23.,  9., 14.]),
array([0.1 , 0.34, 0.58, 0.82, 1.06, 1.3 , 1.54, 1.78, 2.02, 2.26, 2.5 ]),
<a list of 10 Patch objects>)
```



```
data_to_plot = [df['col1'], df['col2'], df['col3'], df['col4']]
sns.set_style("whitegrid")
fig = plt.figure(1, figsize=(12, 8))
ax = fig.add_subplot(111)
bp = ax.boxplot(data_to_plot)
```



```
df.describe()
```

	col1	col2	col3	col4
count	150.000000	150.000000	150.000000	150.000000
mean	5.843333	3.057333	3.758000	1.199333
std	0.828066	0.435866	1.765298	0.762238
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



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