

```
import numpy as np
import pandas as pd
```

```
from google.colab import files
uploaded = files.upload()
```


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Saving Iris.csv to Iris.csv

```
import io
df = pd.read_csv(io.BytesIO(uploaded['Iris.csv']))
df
```



	Id	SepalLengthCm	SepalWidthCm	PetalLengthCm	PetalWidthCm	Species
0	1	5.1	3.5	1.4	0.2	Iris-setosa
1	2	4.9	3.0	1.4	0.2	Iris-setosa
2	3	4.7	3.2	1.3	0.2	Iris-setosa
3	4	4.6	3.1	1.5	0.2	Iris-setosa
4	5	5.0	3.6	1.4	0.2	Iris-setosa
...	...	...	...	...	...	...
145	146	6.7	3.0	5.2	2.3	Iris-virginica
146	147	6.3	2.5	5.0	1.9	Iris-virginica
147	148	6.5	3.0	5.2	2.0	Iris-virginica
148	149	6.2	3.4	5.4	2.3	Iris-virginica
149	150	5.9	3.0	5.1	1.8	Iris-virginica

150 rows × 6 columns

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

6
```

```
df.info()

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 150 entries, 0 to 149
Data columns (total 6 columns):
#   Column          Non-Null Count  Dtype
---  -
#   Column          Non-Null Count  Dtype
```

```

0   Id          150 non-null   int64
1   SepalLengthCm 150 non-null   float64
2   SepalWidthCm  150 non-null   float64
3   PetalLengthCm 150 non-null   float64
4   PetalWidthCm  150 non-null   float64
5   Species       150 non-null   object
dtypes: float64(4), int64(1), object(1)
memory usage: 7.2+ KB

```

```
df.describe()
```

	Id	SepalLengthCm	SepalWidthCm	PetalLengthCm	PetalWidthCm
<b>count</b>	150.000000	150.000000	150.000000	150.000000	150.000000
<b>mean</b>	75.500000	5.843333	3.054000	3.758667	1.198667
<b>std</b>	43.445368	0.828066	0.433594	1.764420	0.763161
<b>min</b>	1.000000	4.300000	2.000000	1.000000	0.100000
<b>25%</b>	38.250000	5.100000	2.800000	1.600000	0.300000
<b>50%</b>	75.500000	5.800000	3.000000	4.350000	1.300000
<b>75%</b>	112.750000	6.400000	3.300000	5.100000	1.800000
<b>max</b>	150.000000	7.900000	4.400000	6.900000	2.500000

```

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

```

```

# importing packages
import seaborn as sns
import matplotlib.pyplot as plt

```

```
fig, axes = plt.subplots(2, 2, figsize=(10,10))
```

```

axes[0,0].set_title("Sepal Length")
axes[0,0].hist(df['SepalLengthCm'], bins=7)

```

```

axes[0,1].set_title("Sepal Width")
axes[0,1].hist(df['SepalWidthCm'], bins=5);

```

```

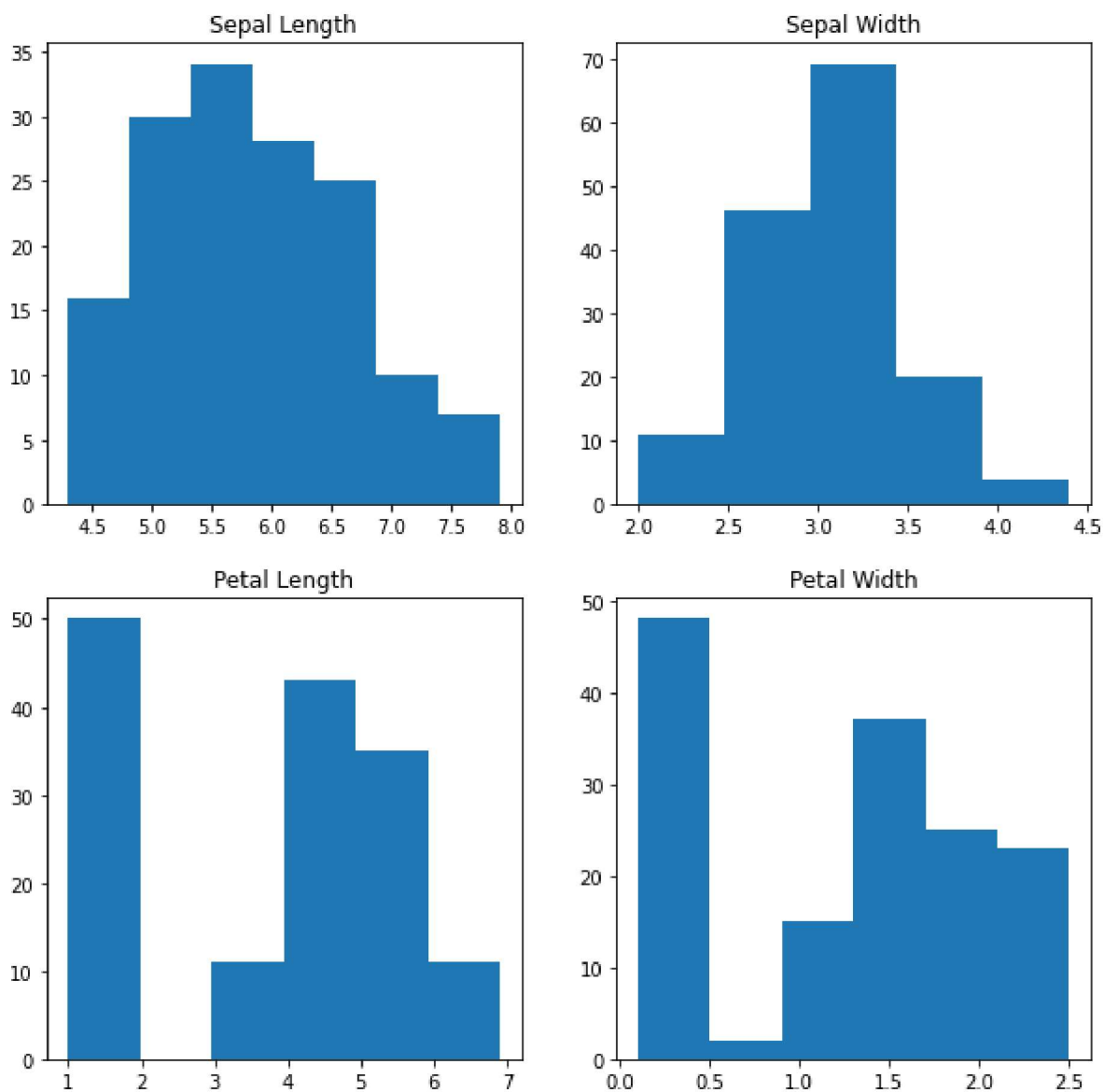
axes[1,0].set_title("Petal Length")
axes[1,0].hist(df['PetalLengthCm'], bins=6);

```

```

axes[1,1].set_title("Petal Width")
axes[1,1].hist(df['PetalWidthCm'], bins=6);

```



```
# importing packages
import seaborn as sns
import matplotlib.pyplot as plt

def graph(y):
    sns.boxplot(x="Species", y=y, data=df)

plt.figure(figsize=(10,10))

# Adding the subplot at the specified
# grid position
plt.subplot(221)
graph('SepalLengthCm')

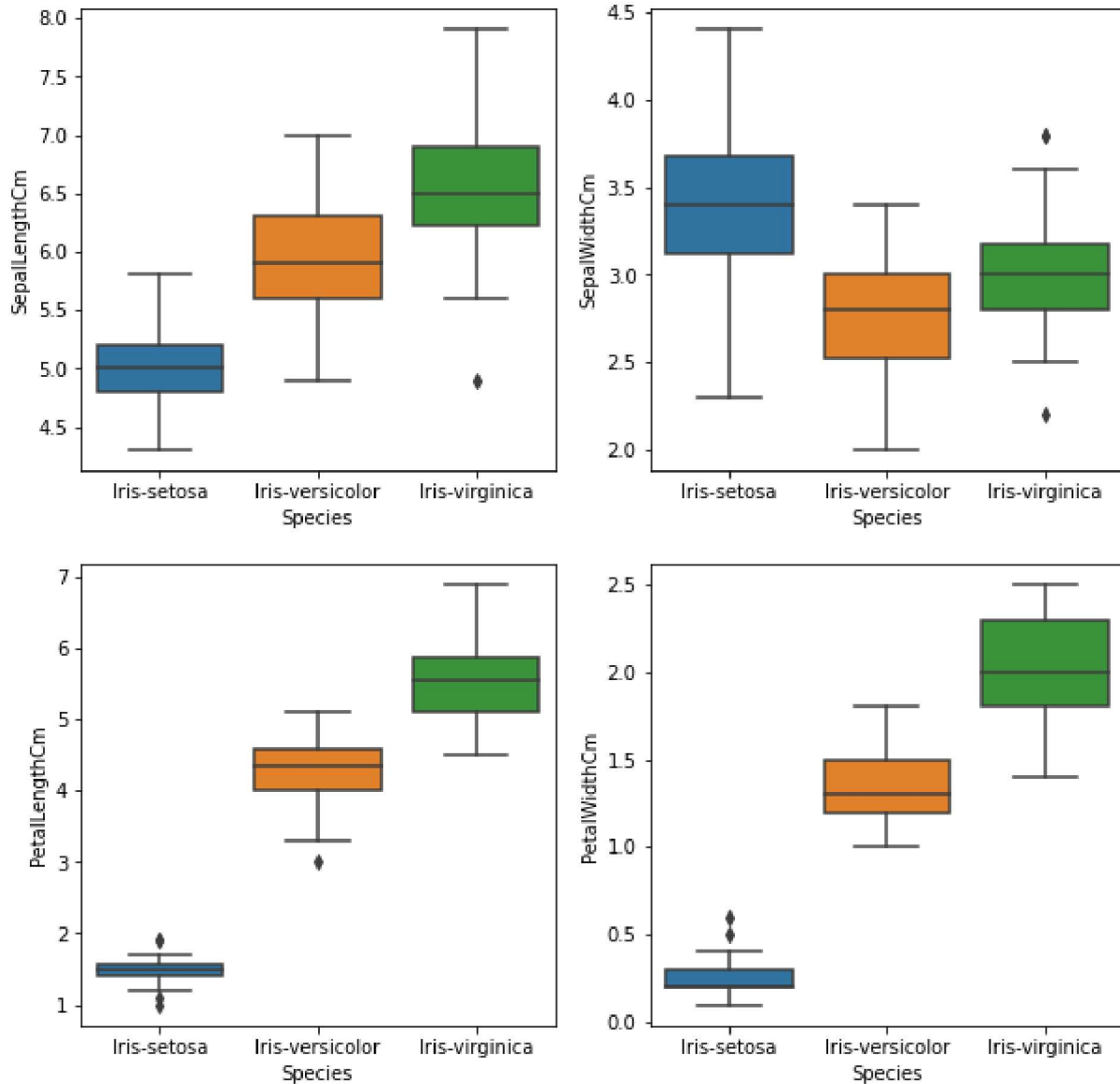
plt.subplot(222)
graph('SepalWidthCm')

plt.subplot(223)
```

```
graph('PetalLengthCm')
```

```
plt.subplot(224)  
graph('PetalWidthCm')
```

```
plt.show()
```



```
# importing packages  
import seaborn as sns  
import matplotlib.pyplot as plt
```

```
# Load the dataset  
df = pd.read_csv('Iris.csv')
```

```
sns.boxplot(x='SepalWidthCm', data=df)
```

<matplotlib.axes.\_subplots.AxesSubplot at 0x7fe176e69290>

