

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

df = pd.read_csv("/content/sample_data/iris-flower-dataset.csv")

headers = ["Sepal-length", "Sepal-width", "Petal-length", "Petal-width", "Species"]
df.columns = headers

print("Head\n")
print(df.head())
print("\n\nTail\n")
print(df.tail())
```

Head

	Sepal-length	Sepal-width	Petal-length	Petal-width	Species
0	4.9	3.0	1.4	0.2	Iris-setosa
1	4.7	3.2	1.3	0.2	Iris-setosa
2	4.6	3.1	1.5	0.2	Iris-setosa
3	5.0	3.6	1.4	0.2	Iris-setosa
4	5.4	3.9	1.7	0.4	Iris-setosa

Tail

	Sepal-length	Sepal-width	Petal-length	Petal-width	Species
144	6.7	3.0	5.2	2.3	Iris-virginica
145	6.3	2.5	5.0	1.9	Iris-virginica
146	6.5	3.0	5.2	2.0	Iris-virginica
147	6.2	3.4	5.4	2.3	Iris-virginica
148	5.9	3.0	5.1	1.8	Iris-virginica

```
print("\n\nInfo\n")
print(df.info())
```

Info

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 149 entries, 0 to 148
Data columns (total 5 columns):
#   Column          Non-Null Count  Dtype
---  -
0   Sepal-length    149 non-null   float64
1   Sepal-width     149 non-null   float64
2   Petal-length     149 non-null   float64
3   Petal-width     149 non-null   float64
4   Species         149 non-null   object
dtypes: float64(4), object(1)
memory usage: 5.9+ KB
None
```

```
print("\n\nShape\n")
print(df.shape)
```

Shape

(149, 5)

```
print("\n\nData type\n")
print(df.dtypes)
```

Data type

```
Sepal-length    float64
Sepal-width     float64
Petal-length    float64
Petal-width     float64
Species         object
dtype: object
```

```
print("\n\nDescription\n")
print(df.describe())
```

Description

	Sepal-length	Sepal-width	Petal-length	Petal-width
count	149.000000	149.000000	149.000000	149.000000
mean	5.848322	3.051007	3.774497	1.205369
std	0.828594	0.433499	1.759651	0.761292
min	4.300000	2.000000	1.000000	0.100000
25%	5.100000	2.800000	1.600000	0.300000
50%	5.800000	3.000000	4.400000	1.300000
75%	6.400000	3.300000	5.100000	1.800000
max	7.900000	4.400000	6.900000	2.500000

```
print("\n\nHistogram\n")
df.hist()
plt.show()
```

Histogram

```
Sepal-length      Sepal-width
```

```
print("\n\nBox plot comparision\n")
df.boxplot()
plt.show()
```



Box plot comparision

