```
import pandas as pd
import numpy as np

df = pd.read_csv('/content/IRIS.csv')

df
```

	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
...	...	...	...	...	...
145	6.7	3.0	5.2	2.3	Iris-virginica
146	6.3	2.5	5.0	1.9	Iris-virginica
147	6.5	3.0	5.2	2.0	Iris-virginica
148	6.2	3.4	5.4	2.3	Iris-virginica
149	5.9	3.0	5.1	1.8	Iris-virginica

150 rows × 5 columns

```
df.describe()
```

	sepal_length	sepal_width	petal_length	petal_width
count	150.000000	150.000000	150.000000	150.000000
mean	5.843333	3.054000	3.758667	1.198667
std	0.828066	0.433594	1.764420	0.763161
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

```
df["sepal_length"].describe()
```

	sepal_length
count	150.000000
mean	5.843333
std	0.828066
min	4.300000
25%	5.100000
50%	5.800000
75%	6.400000
max	7.900000

dtype: float64

```
df.groupby("species").describe()
```

	sepal_length								sepal_width		...	petal_length		petal_width						
	count	mean	std	min	25%	50%	75%	max	count	mean	...	75%	max	count	mean	std	min	25%	50%	75%	max
species																				
Iris-setosa	50.0	5.006	0.352490	4.3	4.800	5.0	5.2	5.8	50.0	3.418	...	1.575	1.9	50.0	0.244	0.107210	0.1	0.2	0.2	0.3	0.6
Iris-versicolor	50.0	5.936	0.516171	4.9	5.600	5.9	6.3	7.0	50.0	2.770	...	4.600	5.1	50.0	1.326	0.197753	1.0	1.2	1.3	1.5	1.8
Iris-																				

```
df.groupby("species").describe().sum()
```

		0
sepal_length	count	150.000000
	mean	17.530000
	std	1.504540
	min	14.100000
	25%	16.625000
	50%	17.400000
	75%	18.400000
	max	20.700000
sepal_width	count	150.000000
	mean	9.162000
	std	1.017319
	min	6.500000
	25%	8.450000
	50%	9.200000
	75%	9.850000
	max	11.600000
petal_length	count	150.000000
	mean	11.276000
	std	1.195317
	min	8.500000
	25%	10.500000
	50%	11.400000
	75%	12.050000
	max	13.900000
petal_width	count	150.000000
	mean	3.596000
	std	0.579612
	min	2.500000
	25%	3.200000
	50%	3.500000
	75%	4.100000

```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 150 entries, 0 to 149
Data columns (total 5 columns):
 #   Column        Non-Null Count  Dtype  
---  ------        --------------  -----  
 0   sepal_length  150 non-null    float64
dtypes: float64
```

```
 1   sepal_width   150 non-null    float64
 2   petal_length  150 non-null    float64
 3   petal_width   150 non-null    float64
 4   species       150 non-null    object
dtypes: float64(4), object(1)
memory usage: 6.0+ KB
```