Pandas DataFrame value_counts()

The value_counts () function is used to obtain a DataFrame that contains unique value statistics. The payoff will be downhill so that the first thing becomes a recurring theme. By default, rows containing any NA values are omitted from the result. By default, the emerging Series will be in sequence so that the first thing becomes a recurring row.

DataFrame.value_counts(*subset=None*, *normalize=False*, *sort=True*, *ascending=False*)

Parameters:	**subset list-like, optional** Columns to use when counting unique combinations.
	normalize bool, default False Return proportions rather than frequencies.
	sortbool, default True Sort by frequencies.
	ascending bool, default False Sort in ascending order.

```
import numpy as np
import pandas as pd

Example 1:

df = pd.DataFrame({'gender': ['male', 'female','female','male','male','female', np.nan]})
print(df)
```

	gender
0	male
1	female
2	female
3	female
4	male
5	male
6	NaN

```
print(df.value_counts())
```

gender	
male	3
female	3

```
dtype: int64


Example 2:

df = pd.DataFrame({'num_legs': [2, 4, 4, 2, 6, np.nan],
                   'num_wings': [2, 0, 0, 2, 0, 0]},
                  index=['parrot', 'cow', 'elephant', 'eagle', 'ant','unknown'])
#original dataframe

print(df)
```

	num_legs	num_wings
parrot	2.0	2
cow	4.0	0
elephant	4.0	0
eagle	2.0	2
ant	6.0	0
unknown	NaN	0

print(df.value_counts())

	num_legs	num_wings
4.0	0	2
2.0	2	2
6.0	0	1

dtype: int64

#Example 3:
print(df.value_counts(ascending=True))

	num_legs	num_wings
6.0	0	1
2.0	2	2
4.0	0	2

dtype: int64

Thus, we can see that value_counts() is a handy tool, and we can do some interesting analysis with this single line of code.