Zipf Distribution

‹ Previous Next ›

Zipf distributions are used to sample data based on zipf's law.

Zipf's Law: In a collection, the nth common term is 1/n times of the most common term. E.g. the 5th most common word in English occurs nearly 1/5 times as often as the most common word.

It has two parameters:

`a` - distribution parameter.

`size` - The shape of the returned array.

Example

Draw out a sample for zipf distribution with distribution parameter 2 with size 2x3:

```
from numpy import random

x = random.zipf(a=2, size=(2, 3))

print(x)
```

Visualization of Zipf Distribution

Sample 1000 points but plotting only ones with value < 10 for more meaningful chart.

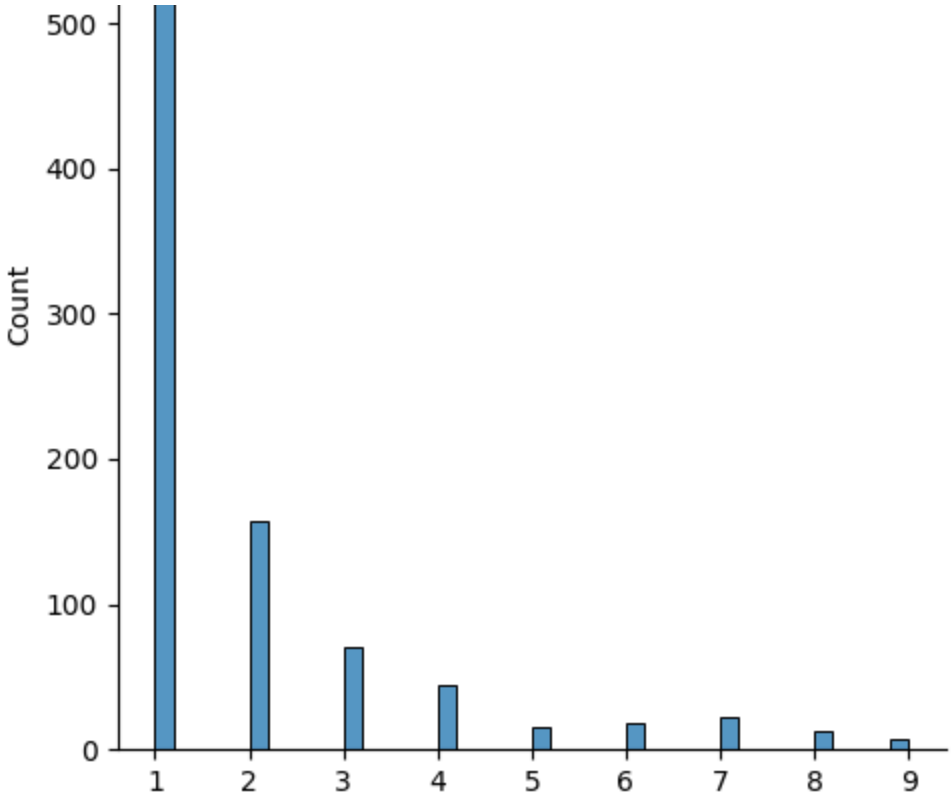
Example

```
from numpy import random
import matplotlib.pyplot as plt
import seaborn as sns

x = random.zipf(a=2, size=1000)
sns.displot(x[x<10])

plt.show()
```

Result



Try it Yourself »

Exercise ?

How many parameters does the `random.zipf()` method have?

- ○ 1
- ○ 2
- ○ 3

Top Tutorials

HTML Tutorial
CSS Tutorial
JavaScript Tutorial
How To Tutorial
SQL Tutorial
Python Tutorial
W3.CSS Tutorial
Bootstrap Tutorial
PHP Tutorial
Java Tutorial
C++ Tutorial
jQuery Tutorial

Top References

HTML Reference
CSS Reference
JavaScript Reference
SQL Reference
Python Reference
W3.CSS Reference
Bootstrap Reference
PHP Reference
HTML Colors
Java Reference
Angular Reference
jQuery Reference

Top Examples

HTML Examples
CSS Examples
JavaScript Examples

Get Certified

HTML Certificate
CSS Certificate
JavaScript Certificate