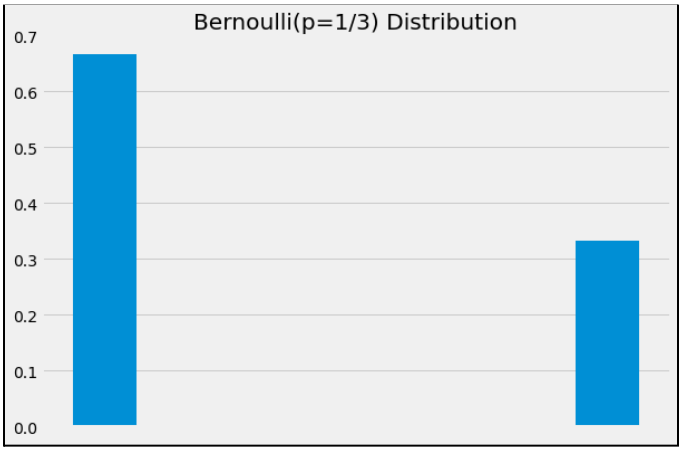
`.rvs()`, Random Value Sample

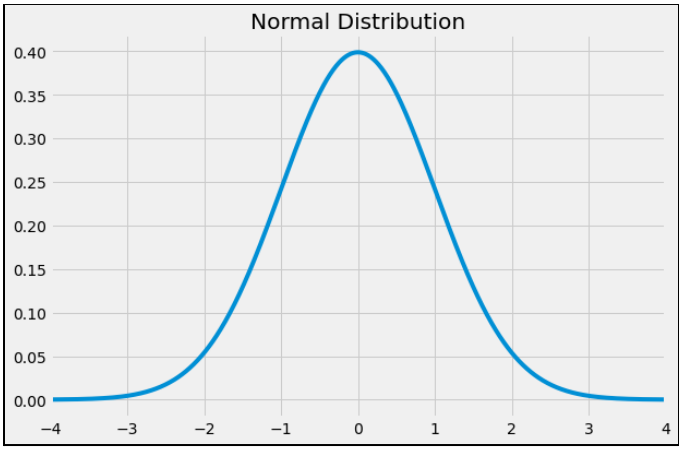
The `.rvs()` function returns a random sample of the distribution with probability equal to the distribution -- if something is 80% likely, that value will be sampled 80% of the time.

Consider a distribution that models choosing the correct option randomly among three possible options:

Randomly choosing among three options:	Samples from the distribution:
 bernoulli(p=1/3)	

Multiple Sample Values: You can also get multiple samples -- as a list -- by specifying that in the `.rvs` function. For example, `D.rvs(10)` returns ten samples!

Let's sample from the standard normal distribution:

Standard Normal Distribution:	Samples from the distribution:
 norm()	

M5-03: Random Value Sampling from a Distribution

Part of the "Polling, Confidence Intervals, and the Normal Distribution" Learning Badge

Video Walkthrough: https://discovery.cs.illinois.edu/m5-03/

Other Functions

Given any distribution that we have initialized into the variable D, we can use any of the following functions provided by scipy.stats:

Property	Python
Find the Expected Value (EV) of the distribution.	`D.mean()`
The 50%-tile result of a distribution.	`D.median()` `D.ppf(0.5)`
Standard Deviation of the distribution.	`D.std()`