The following scripts are written to demonstrate basic Python cryptography and probability functions. Also illustrated is how to generate random numbers using Python’s random number generator functions.

The ‘random’ Python module generates pseudo-random numbers. This module implements pseudo-random number generators for various distributions. For integers, there is uniform selection from a range. For sequences, there is uniform selection of a random element, a function to generate a random permutation of a list in-place, and a function for random sampling without replacement.

On the real line, there are functions to compute uniform, normal (Gaussian), lognormal, negative exponential, gamma, and beta distributions.

For generating distributions of angles, the von Mises distribution is available.

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