Random number examples

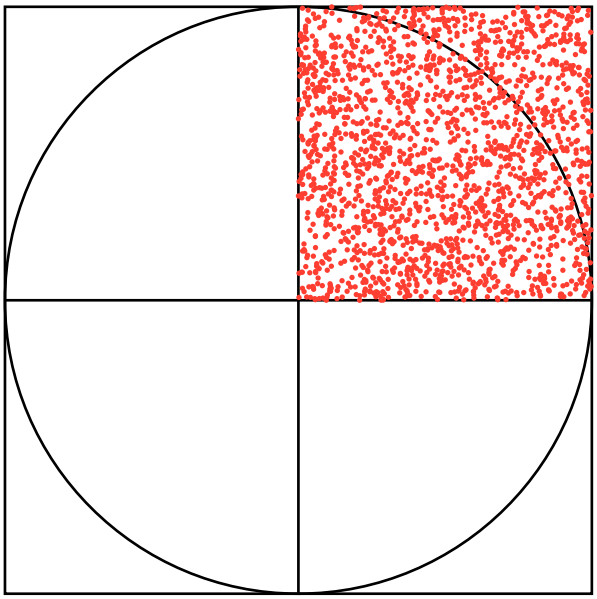
List of 10 random numbers:
0.11511667052170184
0.04144436820443821
0.12233152592608973
0.8033919089481681
0.5932766153927139
0.25913193711525107
0.19763606628348027
0.04109999841104727
0.6616079103345069
0.7448800340632163

Another random number: 0.27597881208080305

Random integer between 1 and 100: 34

Shuffling an array:
Original array: `(1, 2, 4, 3, 5, 7)`
Shuffled array: `(4, 7, 5, 1, 2, 3)`
Shuffled again: `(7, 5, 2, 1, 4, 3)`

Monte Carlo Simulation to Derive the Value of Pi ($n = 2000$):



Number of dots inside the circle: 1590
$n = 2000$
Ratio inside the circle: $\frac{1590}{2000} = 0.795$
Area inside the quarter-circle: $\frac{\pi}{4}r^2$
Area inside the square quadrant: r^2
Expected ratio in the circle: $\frac{\pi}{4}$
$\therefore \pi \approx 0.795 \cdot 4 = 3.18$