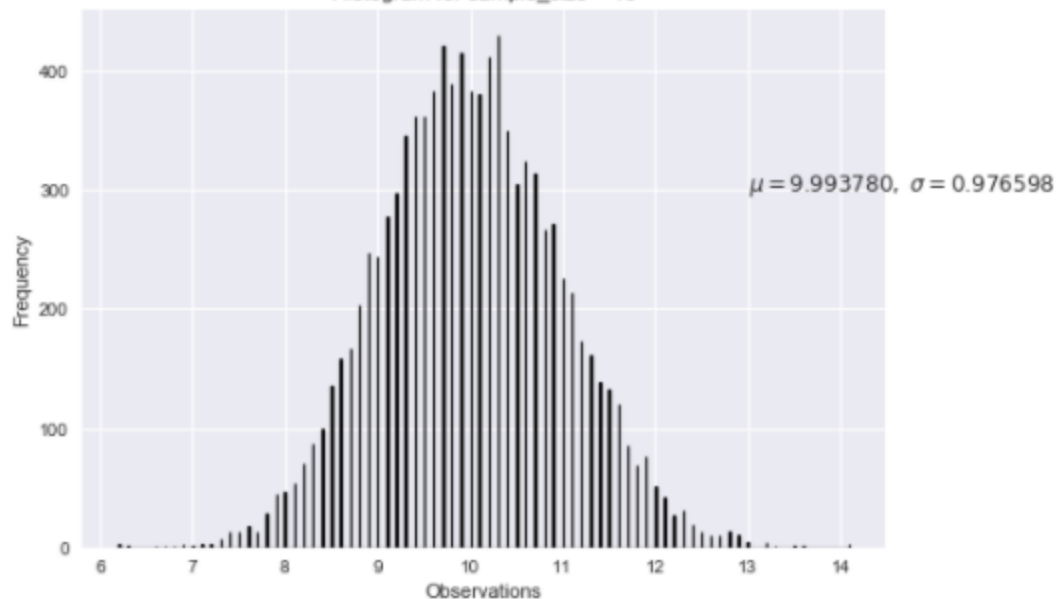


Histogram for sample_size = 10



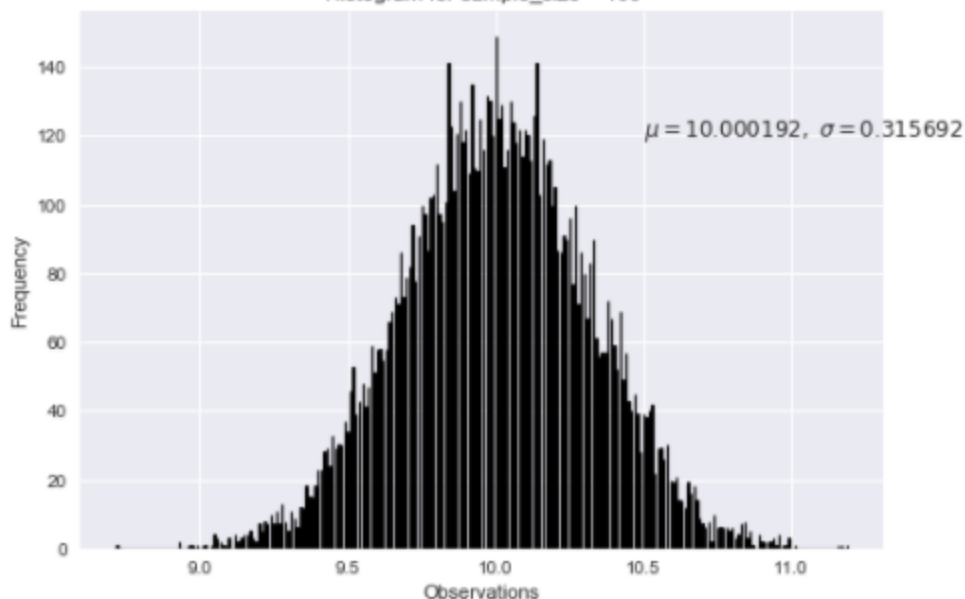
95% Confidence Interval for $N = 10$ is $[9.388478, 10.599082]$

477 times True mean lies out of the 95% Confidence interval

Sample Mean lies in the interval $[9.99, 10.01]$ 383 times for sample_size, $N = 10$

Sample Mean lies in the interval $[9.9, 10.1]$ 1178 times for sample_size, $N = 10$

Histogram for sample_size = 100



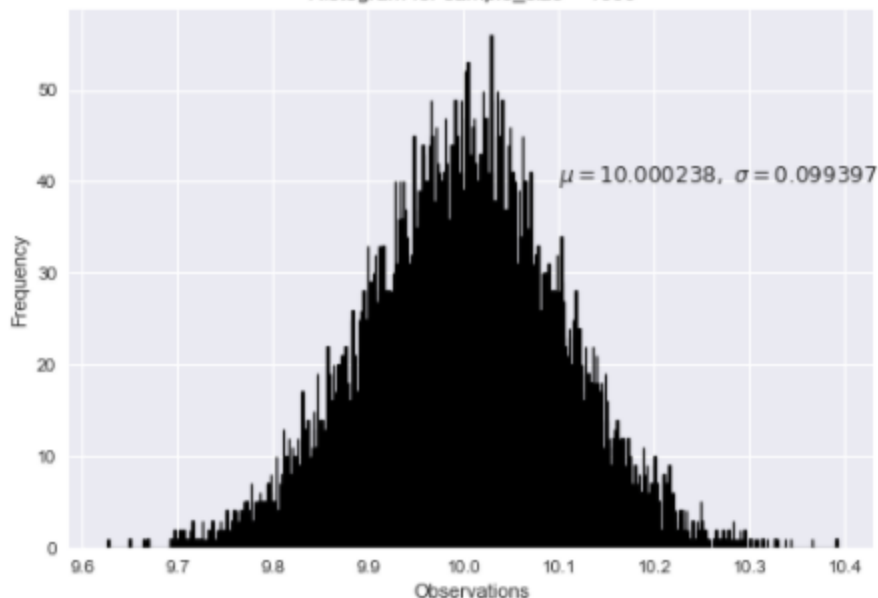
95% Confidence Interval for $N = 100$ is [9.938316 , 10.062068]

471 times True mean lies out of the 95% Confidence interval

Sample Mean lies in the interval [9.99, 10.01] 394 times for sample_size, $N = 100$

Sample Mean lies in the interval [9.9, 10.1] 2570 times for sample_size, $N = 100$

Histogram for sample_size = 1000



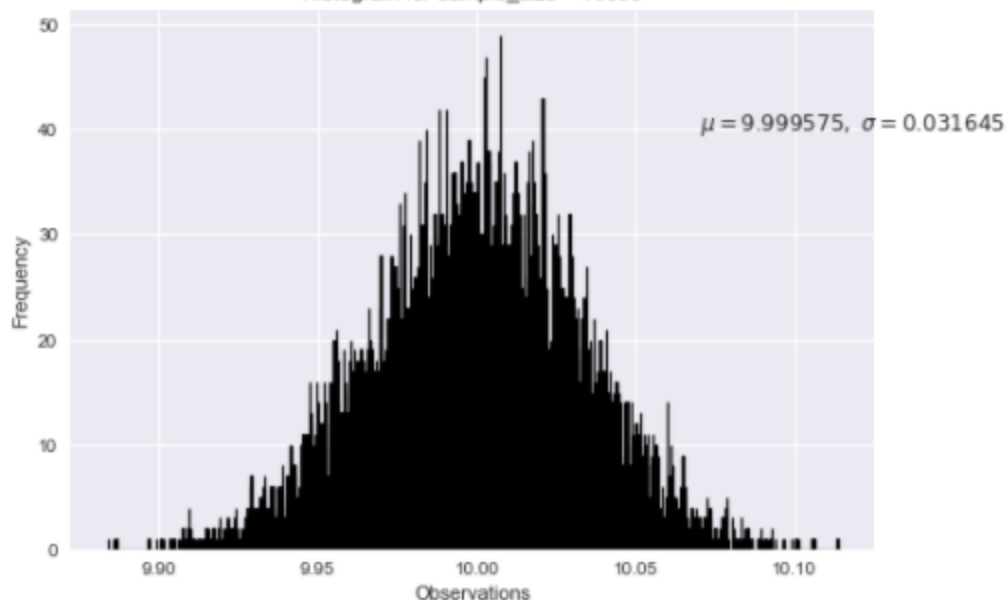
95% Confidence Interval for $N = 1000$ is [9.994077 , 10.006398]

498 times True mean lies out of the 95% Confidence interval

Sample Mean lies in the interval [9.99, 10.01] 881 times for sample_size, $N = 1000$

Sample Mean lies in the interval [9.9, 10.1] 6893 times for sample_size, $N = 1000$

Histogram for sample_size = 10000



95% Confidence Interval for $N = 10000$ is [9.998954 , 10.000195]

473 times True mean lies out of the 95% Confidence interval

Sample Mean lies in the interval [9.99, 10.01] 2432 times for sample_size, $N = 10000$

Sample Mean lies in the interval [9.9, 10.1] 9989 times for sample_size, $N = 10000$