Anthony D’Alessandro

Probability and Applied Statistics – Project Two StatsLibrary Demo

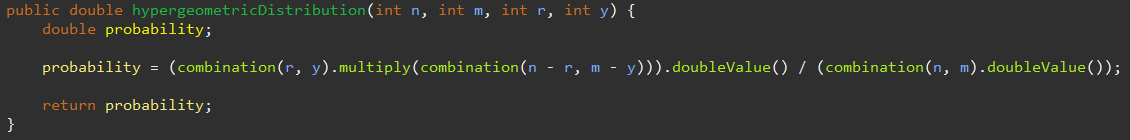
Hypergeometric Distribution

Probability

* Given the number of successes in sample y = 2, population N = 10, sample size n = 5, and number of successes in the population r = 4

Output:

Hypergeometric Distribution Method:

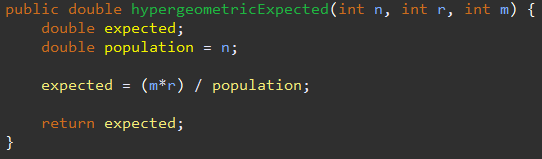


Expected Value

* Given the population N = 10, sample size n = 5, and number of successes in the population r = 4

Output:

Expected Value Method:

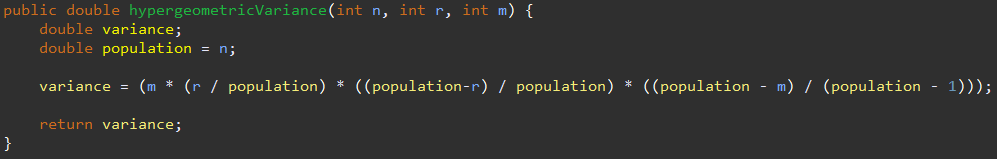


Variance

* Given the population N = 10, sample size n = 5, and number of successes in the population r = 4

Output:

Variance Method:

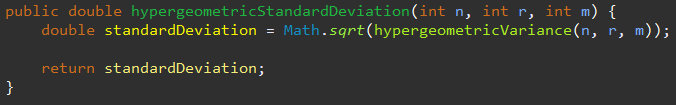


Standard Deviation

* Given the population N = 10, sample size n = 5, and number of successes in the population r = 4

Output:

Standard Deviation Method:



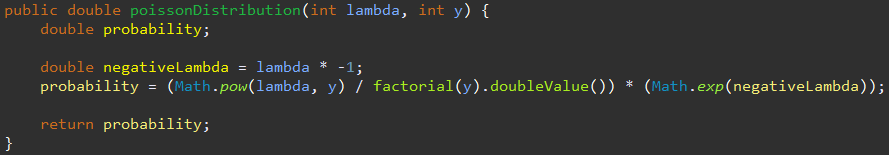
Poisson Distribution

Probability

* Given the average number of events lambda = 2 and the number of occurrences of an event y = 4

Output: 

Poisson Distribution Method:



Expected Value and Variance

* Given the average number of events lambda = 2



Output:

Expected Value and Variance Method:



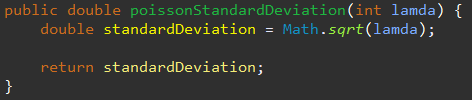
Standard Deviation

* Given the average number of events lambda = 2



Output:

Standard Deviation Method:



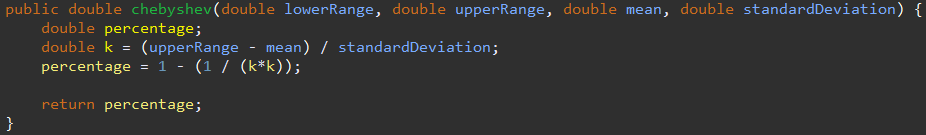
Chebyshev’s Theorem

Probability Given Standard Deviation

* Given a lower range of 16, upper range of 24, mean = 20, and standard deviation = 2

Output:

Chebyshev Method:



Probability Given Variance

* Given a lower range of 16, upper range of 24, mean = 20, and variance = 4

Output:

Chebyshev Given Variance Method:

