StatsLibrary 2

Melvin Vazquez Andujar

April 26, 2024

Abstract:

This is the second half of the formula sheet from my prob and stats class. This class only holds formulas from the end of chapter 3. No formulas that have calculus are not added to the project but are added to the formula sheet.

Table of Contents

[StatsLibrary2: 2](#_Toc165138365)

[Methods: 2](#_Toc165138366)

[poissonDist(double lambda, double y): 2](#_Toc165138367)

[expectedPoisson(double lambda): 2](#_Toc165138368)

[varPoisson(double lambda): 2](#_Toc165138369)

[TchebysheffTheorem(double k, boolean greaterThan): 2](#_Toc165138370)

[Resolution: 2](#_Toc165138371)

# Result:

A screenshot of a computer

Description automatically generated

# StatsLibrary2:

## Methods:

### poissonDist(double lambda, double y):

This method uses the formula from the textbook. We get a numerator through lambda^y\*e^-lambda, and denominator is the factorial of y. I use the factorial from my first statsLibrary.

### expectedPoisson(double lambda):

This method just returns lambda

### varPoisson(double lambda):

This method just returns lambda

### TchebysheffTheorem(double k, boolean greaterThan):

This method checks to see if greaterThan is true or not, depending on what the Boolean comes out to be a different formula occurs. If it is greater then result will equal otherwise it will just do

# Resolution:

I use this class as a way to test myself on how fast I can code these formulas from the textbook into Java, keeps me on my toes.