

Stats Library Report

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StatsLibrary Class

A simple function that computes the Poisson distribution with the given set of variables:

```
public double findPoissonDistribution(int x, int lambda) {  
    double poissonDistributionNumerator = Math.pow(lambda, x) * Math.pow(Math.E, -1 * lambda);  
    return poissonDistributionNumerator/findFactorial(x).intValue();  
}
```

A simple function that computes Chebyshev's theorem with the given variable:

```
public double findChebyshevsTheorem(int k) {  
    return (1 - (1 / Math.pow(k, 2)));  
}
```

A simple function that computes the uniform distribution with the given set of variables:

```
public double findUniformDistribution(double a, double b) {  
    return (1/(b - a));  
}
```

StatsLibrary Testing

The *TestStatsLibrary* tester class returns some simple results displaying the three functions in use:

```
Poisson Distribution where x=1 and lambda=3: 14.936120510359185%  
Chebyshev's Theorem where k=2: 75.0%  
Uniform Distribution where a=2 and b=5: 33.33333333333333%
```