Estimating the Paramater of the Poisson Distribution with MLE and Bayes

Maximum Likelihood Estimation

For a Poisson distribution, the MLE estimator matches the method of moments estimator with $\hat{\lambda} = \bar{X}$, while the standard error of $\hat{\lambda}$ is $s_{\hat{\lambda}} = \sqrt{\frac{\hat{\lambda}}{n}}$.

```
mle.lambdaBar <- mean(data)
mle.sLambdaBar <- sqrt(mle.lambdaBar / length(data))
```

Thus the MLE estimates of $\bar{\lambda}$ and $s_{\bar{\lambda}}$ are 24.9130435 and 1.0407573, respectively.