

# Q3 Learning Check 3

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```
# Number of customers arriving at a bank in an hour
customer_counts <- c(5, 9, 3)

# Function to calculate the log likelihood for a given lambda
likelihood <- function(lambda, data) {
  prod(dpois(customer_counts, lambda))
}

# Applying optimize function for MLE
optimize(likelihood, interval = c(3, 9), maximum = T)
```

```
## $maximum
## [1] 5.666664
##
## $objective
## [1] 0.001015006
```

```
print(paste("Mean: ", mean(customer_counts)))
```

```
## [1] "Mean: 5.666666666666667"
```